FCC Test Report

FCC ID	:	**Q9DAPEX017**
Equipment	:	**Wireless Access Point**
Brand Name	:	**aruba、Hewlett Packard Enterprise**
Model Name	:	**APEX017**
Applicant	:	**Hewlett Packard Enterprise Company 3333 Scott Blvd Santa Clara, CA. 94089**
Manufacturer	:	**Hewlett Packard Enterprise Company 3333 Scott Blvd Santa Clara, CA. 94089**
Standard	:	**47 CFR FCC Part 15.407**

The product was received on May 27, 2019, and testing was started from May 29, 2019 and completed on Jun. 17, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Allen Lin

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR952258-01AN	01	Initial issue of report	Oct. 03, 2019

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Sam Tsai

Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20)	5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5250-5350	n (HT40), ac (VHT40)	5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5250-5350	ac (VHT80)	5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	2TX(Port1)
5.25-5.35GHz	802.11a	20	2TX(Port2)
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX(Port1)
5.47-5.725GHz	802.11a	20	2TX(Port2)
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX(Port1)
5.725-5.85GHz	802.11a	20	2TX(Port2)
5.725-5.85GHz	802.11a	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX(Port1)
5.25-5.35GHz	802.11ac VHT20	20	2TX(Port2)
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX(Port1)
5.47-5.725GHz	802.11ac VHT20	20	2TX(Port2)
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX(Port1)

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT20	20	2TX(Port2)
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX(Port1)
5.25-5.35GHz	802.11ac VHT40	40	2TX(Port2)
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX(Port1)
5.47-5.725GHz	802.11ac VHT40	40	2TX(Port2)
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX(Port1)
5.725-5.85GHz	802.11ac VHT40	40	2TX(Port2)
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX(Port1)
5.25-5.35GHz	802.11ac VHT80	80	2TX(Port2)
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX(Port1)
5.47-5.725GHz	802.11ac VHT80	80	2TX(Port2)
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX(Port1)
5.725-5.85GHz	802.11ac VHT80	80	2TX(Port2)
5.725-5.85GHz	802.11ac VHT80	80	2TX

Note:
- 11a. HT20 and HT40 use a combination of OFDM-BPSK. OPSK. 16OAM. 64OAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- TX is the abbreviation of Transmits.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	HPE	ANT-17	Dipole Antenna	I-PEX
2	HPE	ANT-17	Dipole Antenna	I-PEX
3	HPE	ANT-17	Dipole Antenna	I-PEX
4	HPE	ANT-17	Dipole Antenna	I-PEX

Ant.	Port	Gain (dBi)				
		2.4G		5G		BT
		Vertical polarized	Horizontal polarized	Vertical polarized	Horizontal polarized	
1	1	-	1.8	-	3.5	-
2	2	1.8	-	-	-	-
3	3	-	-	3.5	-	-
4	4	-	-	-	-	2.7

Ant.	Port	Elevation angle above 30 degrees Gain (dBi)	
		5G	
		Vertical polarized	Horizontal polarized
1	1	-	0.9
2	2	-	-
3	3	0.9	-
4	4	-	-

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Cross-polarized antenna combination is Ant.1 with Ant.2.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 3 (port 3) could transmit/receive simultaneously.

Cross-polarized antenna combination is Ant.1 with Ant.3.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 4 (port 4) could transmit/receive simultaneously.

1.1.3 EUT Information

Identify EUT				
Software version	R6201.1.0.3.009			
Operational Condition				
EUT Power Type	From PoE			
EUT Function	☒	Outdoor	☐	Indoor
	☐	Fixed P2P	☒	Client
TPC Function	☒	With TPC Function	☐	Without TPC Function
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Beamforming Function	☒	With beamforming	☐	Without beamforming
Note: Beamforming Function refer as "Letter of Beamforming Declaration"				

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	…
☐	Other:	

1.1.4 Mode Test Duty Cycle

This product is an extension of original one reported under Sporton project number: FR952258AN

Below is the table for the change of the product with respect to the original one.

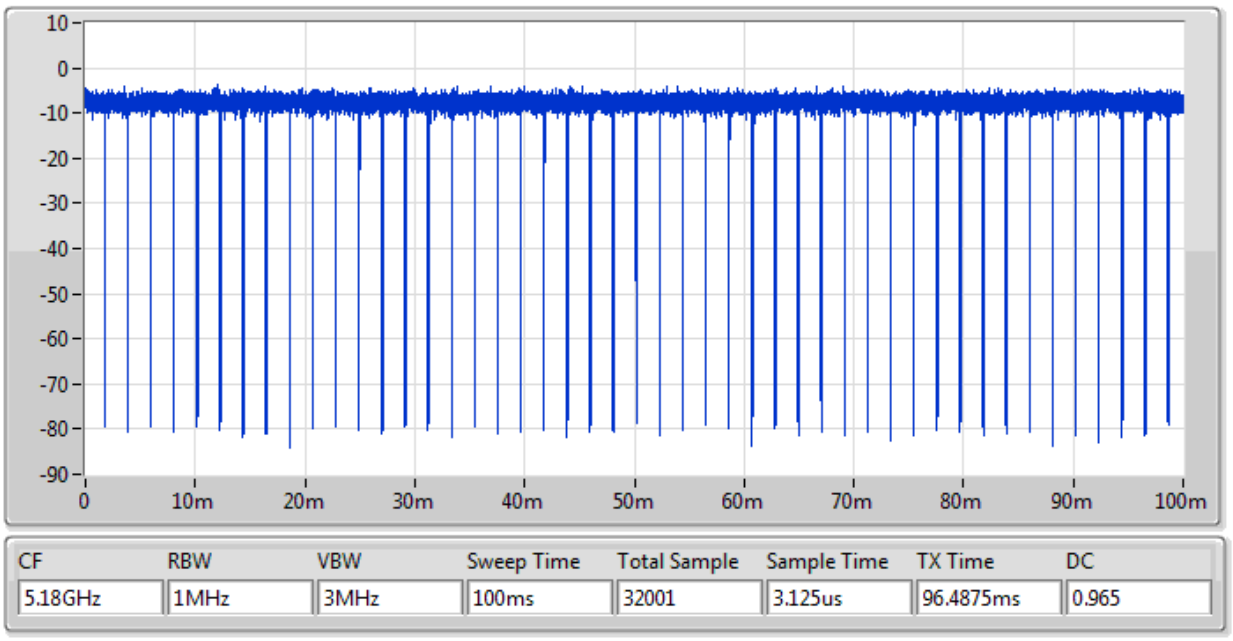
Modifications	Performance Checking
U-NII-2A and U-NII-2C were added	Emission Bandwidth, Maximum Conducted Output Power , Peak Power Spectral Density, Unwanted Emissions were evaluated.

1.1.5 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.965	0.15	2.034m	1k
802.11ac VHT20	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.967	0.15	2.422m	1k
802.11ac VHT80	0.936	0.29	1.141m	1k

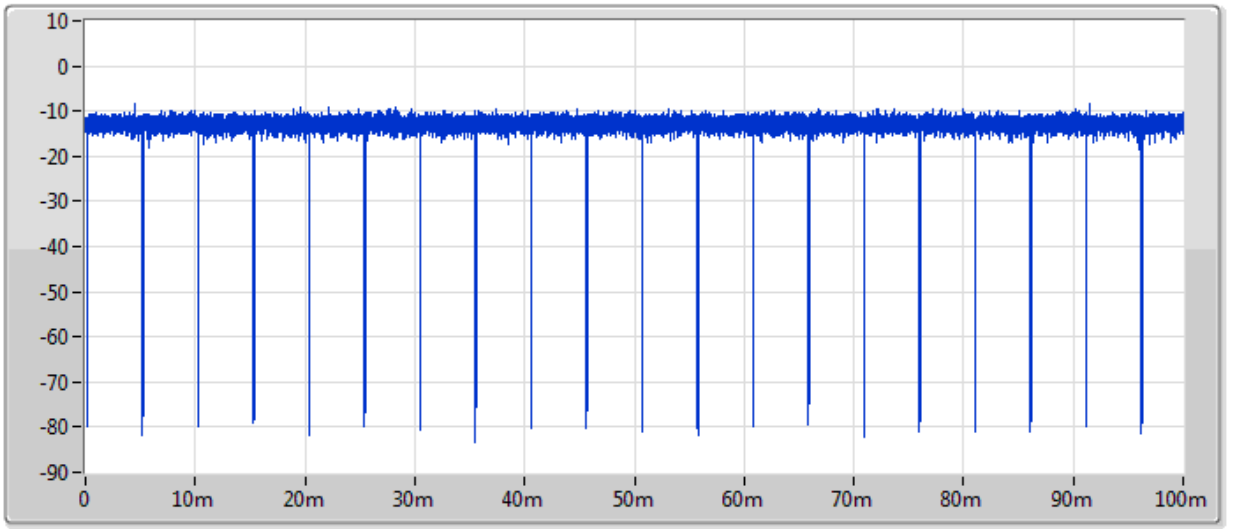
Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

802.11a



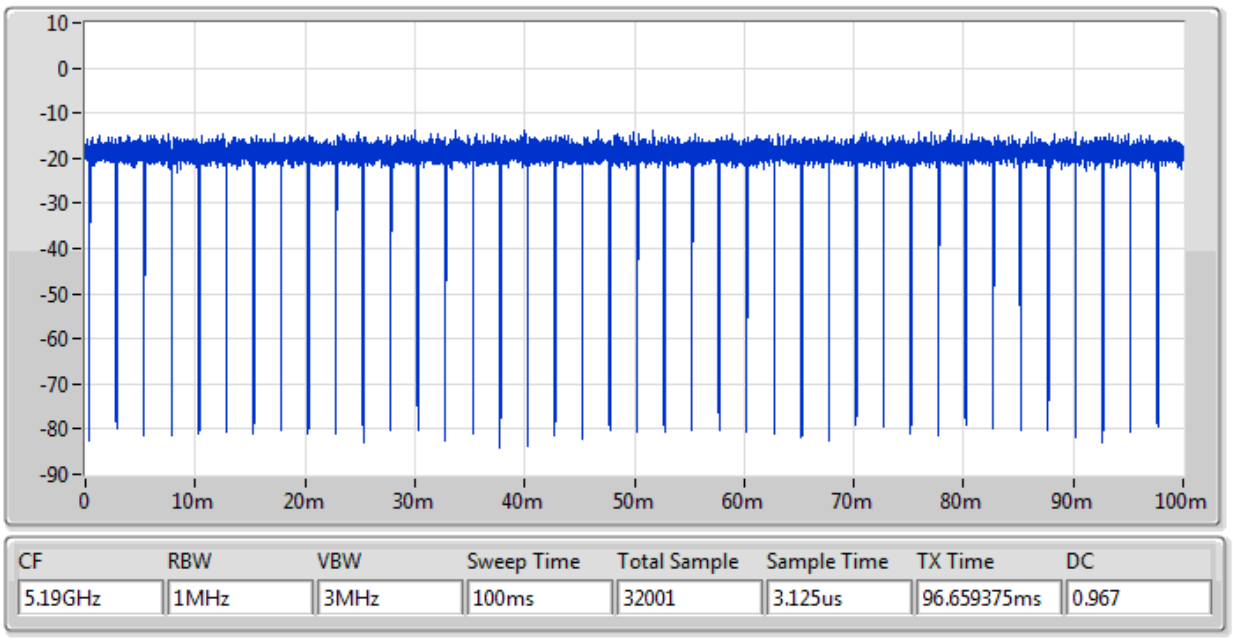
CF	RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
5.18GHz	1MHz	3MHz	100ms	32001	3.125us	96.4875ms	0.965

802.11ac VHT20



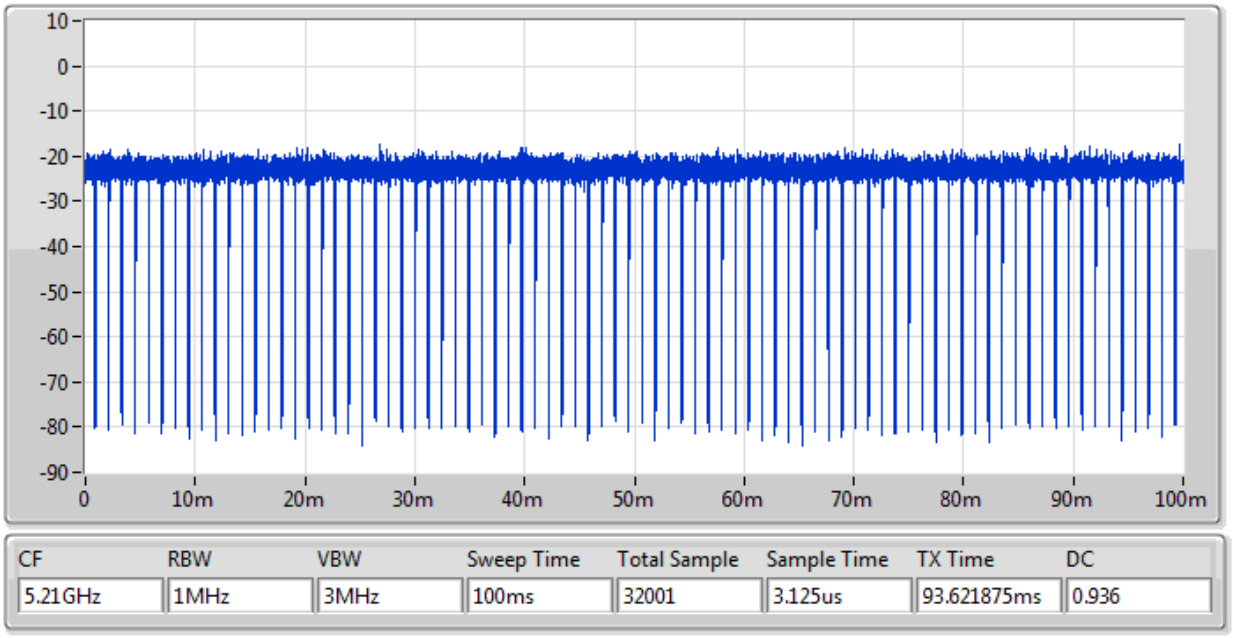
CF	RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
5.18GHz	1MHz	3MHz	100ms	32001	3.125us	98.39375ms	0.984

802.11ac VHT40



CF	RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
5.19GHz	1MHz	3MHz	100ms	32001	3.125us	96.659375ms	0.967

802.11ac VHT80



CF	RBW	VBW	Sweep Time	Total Sample	Sample Time	TX Time	DC
5.21GHz	1MHz	3MHz	100ms	32001	3.125us	93.621875ms	0.936

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 789033 D02 v02r01
- KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Andy	20.3~22°C / 59~63%	31/May/2019~13/Jun/2019
Radiated	03CH03-HY	Andy	23.7~25.1°C / 51.9~62.4%	29/May/2019~17/Jun/2019

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	QRCT V4.0 00123

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX(Port1)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	19.5
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11a_Nss1,(6Mbps)_2TX(Port2)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	19.5
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	19.5

Mode	Power Setting
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11ac VHT20_Nss1,(MCS0)_2TX(Port1)	-
5260MHz	20
5300MHz	20
5320MHz	20.5
5500MHz	20
5580MHz	20
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	19.5
802.11ac VHT20_Nss1,(MCS0)_2TX(Port2)	-
5260MHz	20
5300MHz	20
5320MHz	20.5
5500MHz	20
5580MHz	20
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	19.5
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5260MHz	20
5300MHz	20
5320MHz	20.5
5500MHz	20
5580MHz	20
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	19.5
802.11ac VHT40_Nss1,(MCS0)_2TX(Port1)	-
5270MHz	20.5
5310MHz	19.5
5510MHz	19
5550MHz	20.5
5670MHz	20.5

Mode	Power Setting
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT40_Nss1,(MCS0)_2TX(Port2)	-
5270MHz	20.5
5310MHz	19.5
5510MHz	19
5550MHz	20.5
5670MHz	20.5
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5270MHz	20.5
5310MHz	19.5
5510MHz	19
5550MHz	20.5
5670MHz	20.5
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT80_Nss1,(MCS0)_2TX(Port1)	-
5290MHz	19.5
5530MHz	19
5610MHz	20.5
5690MHz Straddle 5.47-5.725GHz	19.5
5690MHz Straddle 5.725-5.85GHz	19.5
802.11ac VHT80_Nss1,(MCS0)_2TX(Port2)	-
5290MHz	19.5
5530MHz	19
5610MHz	20.5
5690MHz Straddle 5.47-5.725GHz	19.5
5690MHz Straddle 5.725-5.85GHz	19.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5290MHz	19.5
5530MHz	19
5610MHz	20.5
5690MHz Straddle 5.47-5.725GHz	19.5
5690MHz Straddle 5.725-5.85GHz	19.5

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	Continuous Transmits		
1	PoE mode		
Operating Mode > 1GHz	Continuous Transmits		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Continuous Transmits
1	Bluetooth+WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA952258-01 for Co-location RF Exposure Evaluation.	

2.4 Support Equipment

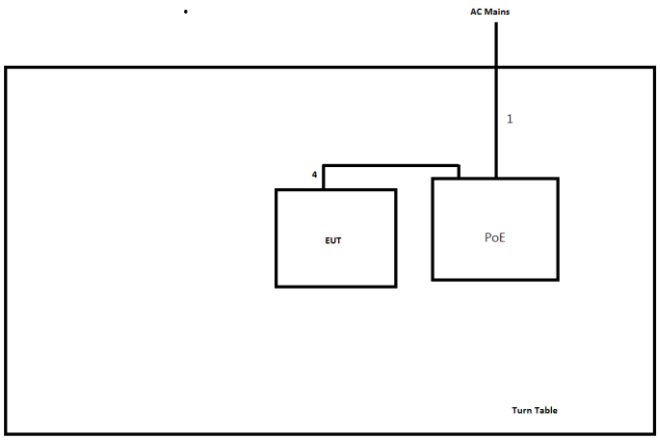
Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for Notebook	DELL	HA65NM130	DoC
3	AC Power Source	GW	APS-9102	N/A

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	PoE	PowerDsine	PD-3501G/AC	N/A

Note: Support equipment No.1 was provided by customer.

2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	AC Power line	No	1.5m
2	Lan Cable	No	1.0m

3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit
UNII Devices
☐ For the 5.15-5.25 GHz band, N/A
☒ For the 5.25-5.35 GHz band, N/A
☒ For the 5.47-5.725 GHz band, N/A
☒ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

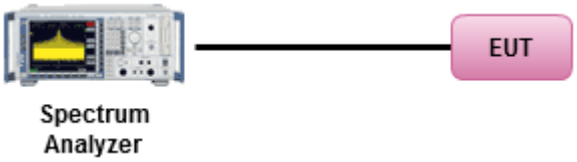
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
	☒ Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
	☐ Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.1.4 Test Setup

Emission Bandwidth


3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☐ For the 5.15-5.25 GHz band:	
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒ For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).	
☒ For the 5.725-5.85 GHz band:	
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.2.2 Measuring Instruments

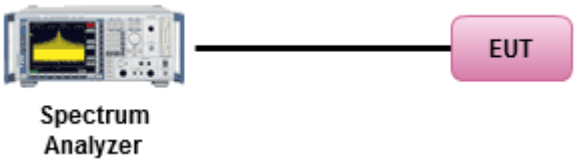
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

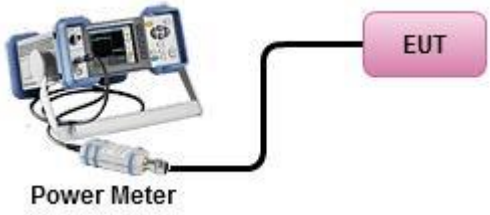
Test Method	
▪ Maximum Conducted Output Power	
	Duty cycle ≥ 98%
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
	☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as KDB 789033, clause E Method PM (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.2.4 Test Setup

RF Output Power (Spectrum Analyzer)



RF Output Power (Power Meter)



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☐ For the 5.15-5.25 GHz band:	
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).	
☒ For the 5.725-5.85 GHz band:	
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

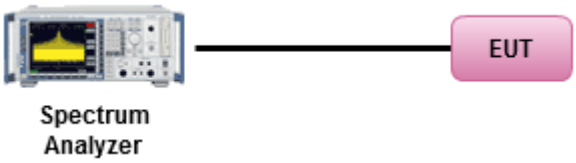
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:		
	☐ Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
	Duty cycle ≥ 98%	
	☒ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).	
	Duty cycle < 98%	
	☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
▪ For conducted measurement.		
	▪ If the EUT supports multiple transmit chains using options given below:	
		▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
	▪	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.3.4 Test Setup

Power Spectral Density


3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.4 Unwanted Emissions

3.4.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3
Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT. Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.			

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

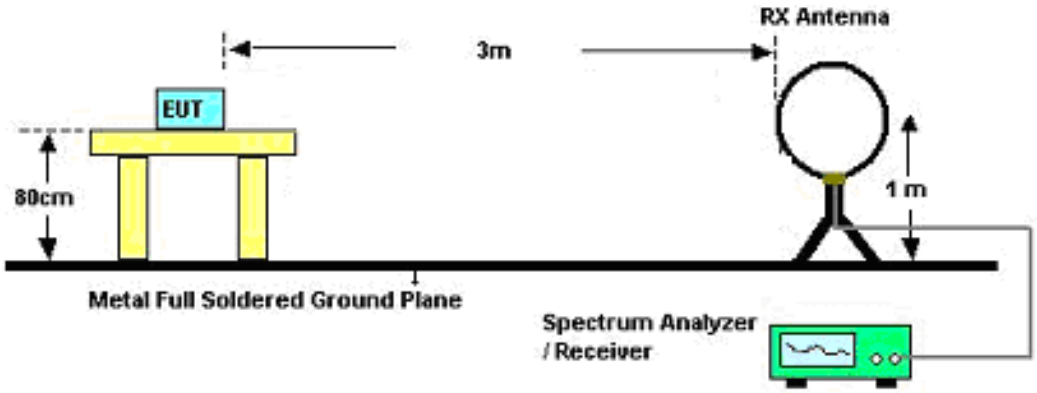
3.4.3 Test Procedures

Test Method
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
▪ For the transmitter unwanted emissions shall be measured using following options below:
▪ Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
▪ For radiated measurement.
▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
▪ The any unwanted emissions level shall not exceed the fundamental emission level.
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

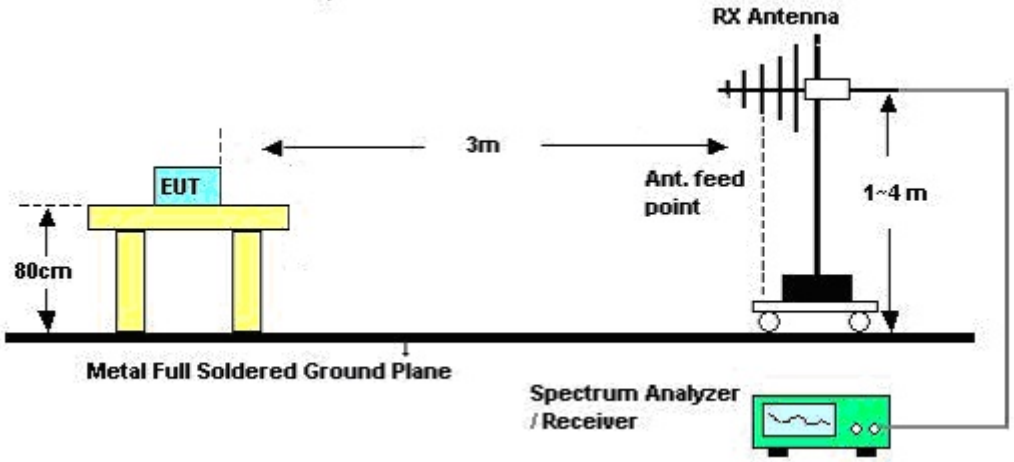
3.4.4 Test Setup

Transmitter Radiated Unwanted Emissions

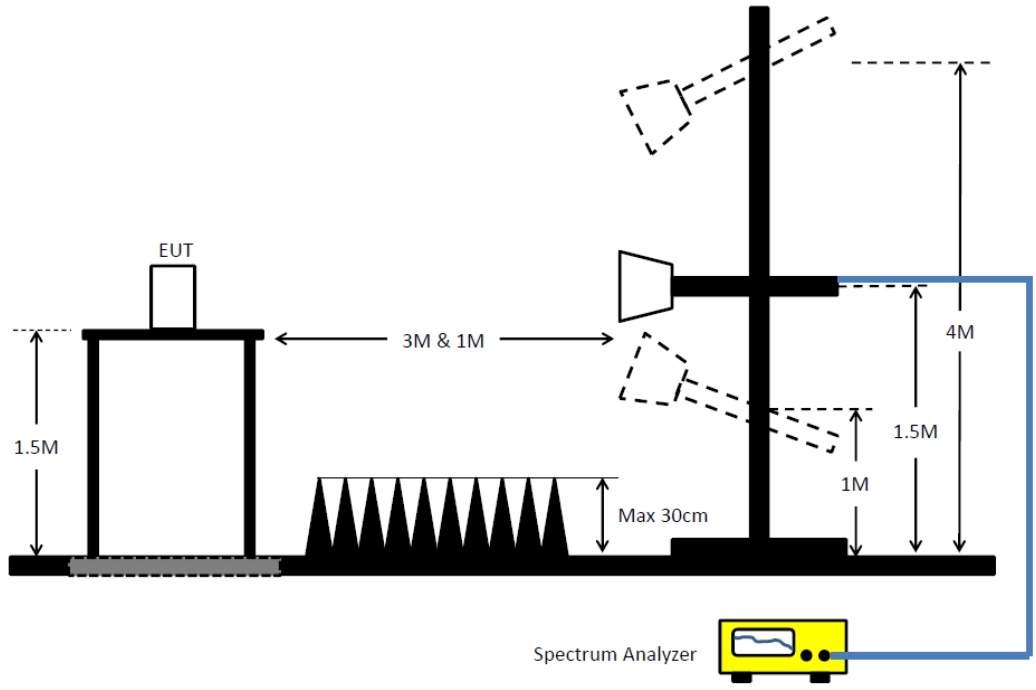
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.4.5 Transmitter Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

3.5 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	21/Mar/2019	20/Mar/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	21/Mar/2019	20/Mar/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	21/Mar/2019	20/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Oct/2018	29/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	30/Oct/2018	29/Oct/2019
Amplifier	IFI	SCCXL150	03CH03-HY	10KHz ~ 100MHz	14/Sep/2017	13/Sep/2019
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
Bilog Antenna with 5dB Pad	ETS	3142B & MTJ6102-05	00022055	26 MHz - 3 GHz	19/Nov/2018	18/Nov/2019
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	05/Sep/2018	04/Sep/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	22/Mar/2019	21/Mar/2020
RF CABLE 6m	HUBER+SUHNER	SUOFLEX 104	SN 805801/4	1GHz ~ 40GHz	21/Mar/2019	20/Mar/2020
RF CABLE 7m	HUBER+SUHNER	SUOFLEX 104	SN 805805/4	1GHz ~ 40GHz	01/May/2019	30/Apr/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	22/Mar/2019	21/Mar/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	09/Mar/ 2019	08/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	15/Mar/2019	14/Mar/2020

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.26M	16.402M	16M4D1D	18.87M	16.372M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.46M	17.631M	17M6D1D	19.98M	17.601M
802.11ac VHT40_Nss1,(MCS0)_2TX	39.78M	36.042M	36M0D1D	39.48M	35.922M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.28M	75.682M	75M7D1D	82.44M	75.562M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.2M	16.432M	16M4D1D	14.49M	13.208M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.4M	17.601M	17M6D1D	15.045M	13.808M
802.11ac VHT40_Nss1,(MCS0)_2TX	39.54M	36.042M	36M0D1D	34.825M	32.884M
802.11ac VHT80_Nss1,(MCS0)_2TX	84.24M	75.802M	75M8D1D	76.65M	72.489M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.1M	3.298M	3M30D1D	3.1M	3.278M
802.11ac VHT20_Nss1,(MCS0)_2TX	3.76M	3.838M	3M84D1D	3.72M	3.838M
802.11ac VHT40_Nss1,(MCS0)_2TX	3.1M	3.398M	3M40D1D	3.1M	3.358M
802.11ac VHT80_Nss1,(MCS0)_2TX	3.1M	3.798M	3M80D1D	3.1M	3.738M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	19.08M	16.402M	19.17M	16.402M
5300MHz_TnomVnom	Pass	Inf	19.14M	16.372M	18.87M	16.402M
5320MHz_TnomVnom	Pass	Inf	19.26M	16.372M	19.17M	16.372M
5500MHz_TnomVnom	Pass	Inf	19.17M	16.372M	18.99M	16.432M
5580MHz_TnomVnom	Pass	Inf	19.08M	16.402M	18.9M	16.402M
5700MHz_TnomVnom	Pass	Inf	19.2M	16.402M	18.81M	16.432M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	14.595M	13.208M	14.49M	13.253M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.1M	3.278M	3.1M	3.298M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	20.46M	17.601M	20.31M	17.631M
5300MHz_TnomVnom	Pass	Inf	20.34M	17.601M	19.98M	17.601M
5320MHz_TnomVnom	Pass	Inf	20.4M	17.631M	20.25M	17.631M
5500MHz_TnomVnom	Pass	Inf	20.37M	17.601M	20.34M	17.601M
5580MHz_TnomVnom	Pass	Inf	20.34M	17.571M	20.31M	17.571M
5700MHz_TnomVnom	Pass	Inf	20.4M	17.601M	20.19M	17.601M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	15.24M	13.823M	15.045M	13.808M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.72M	3.838M	3.76M	3.838M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	Inf	39.78M	35.922M	39.54M	36.042M
5310MHz_TnomVnom	Pass	Inf	39.72M	35.982M	39.48M	35.982M
5510MHz_TnomVnom	Pass	Inf	39.42M	35.922M	39.54M	35.982M
5550MHz_TnomVnom	Pass	Inf	39.54M	36.042M	39.42M	35.922M
5670MHz_TnomVnom	Pass	Inf	39.54M	35.982M	39.42M	35.922M
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	34.825M	32.884M	34.86M	32.919M
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.1M	3.358M	3.1M	3.398M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	Inf	83.28M	75.682M	82.44M	75.562M
5530MHz_TnomVnom	Pass	Inf	84.24M	75.802M	83.04M	75.562M
5610MHz_TnomVnom	Pass	Inf	83.4M	75.682M	83.52M	75.802M
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	77.1M	72.489M	76.65M	72.489M
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.1M	3.798M	3.1M	3.738M

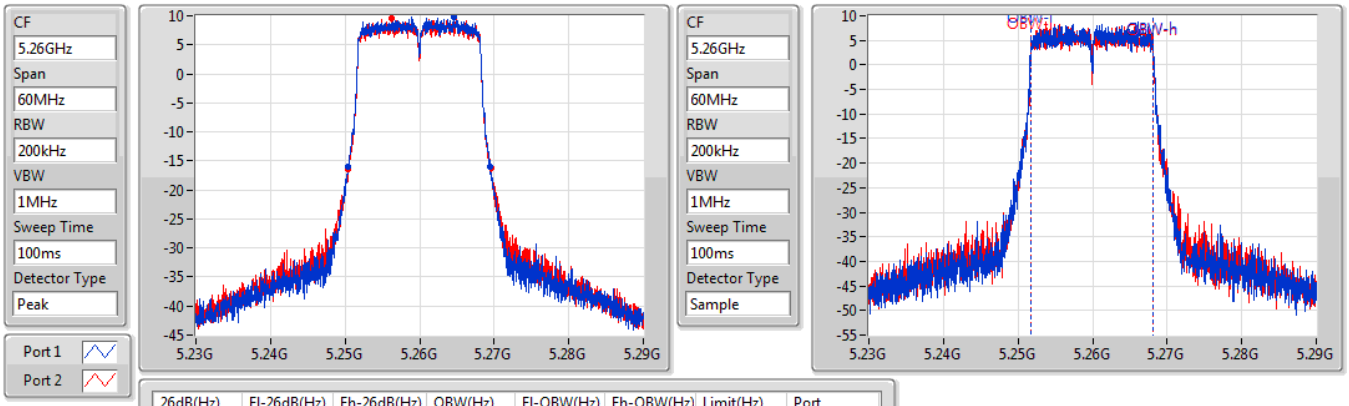
Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_2TX

EBW

5260MHz

30/05/2019



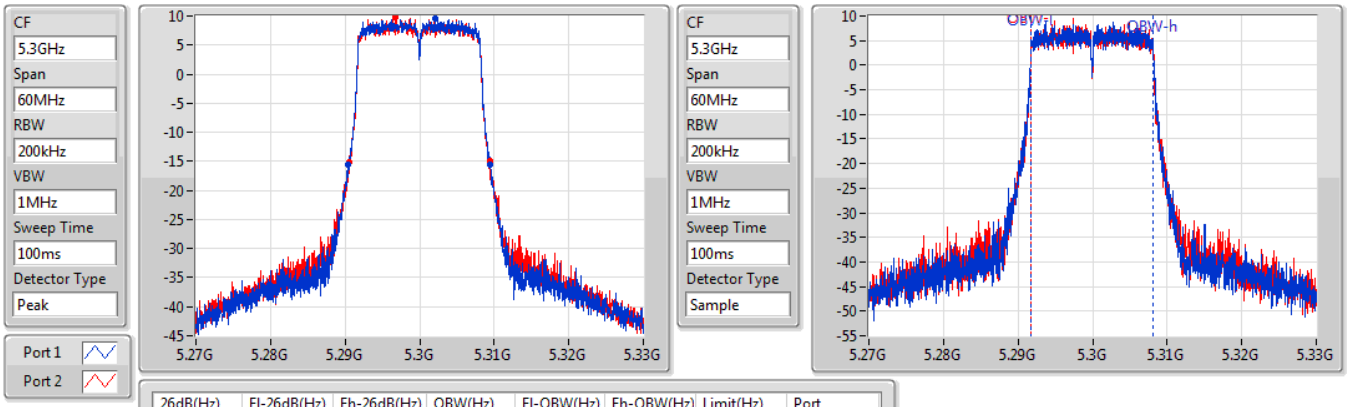
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.08M	5.2504G	5.26948G	16.402M	5.251754G	5.268156G	Inf	1
19.17M	5.25043G	5.2696G	16.402M	5.251724G	5.268126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

30/05/2019



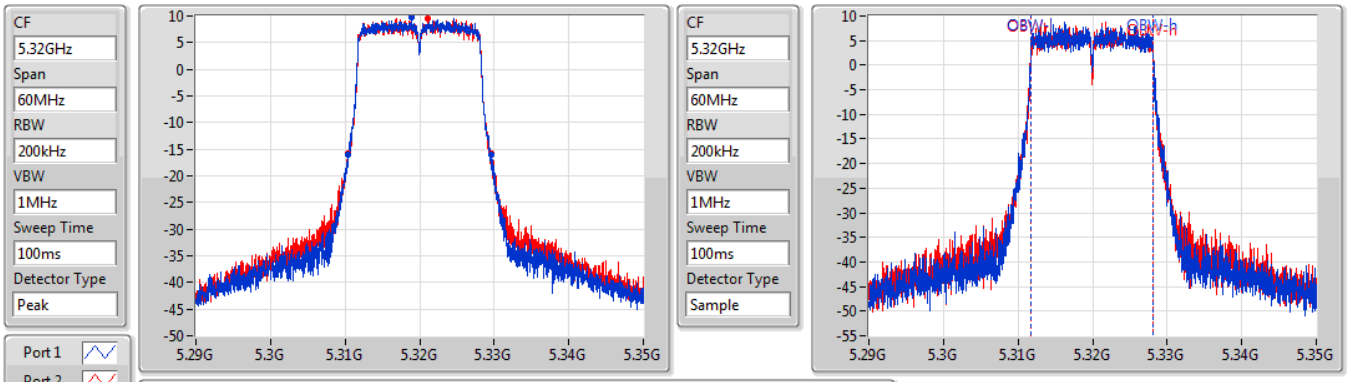
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.14M	5.29037G	5.30951G	16.372M	5.291754G	5.308126G	Inf	1
18.87M	5.29052G	5.30939G	16.402M	5.291754G	5.308156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

30/05/2019



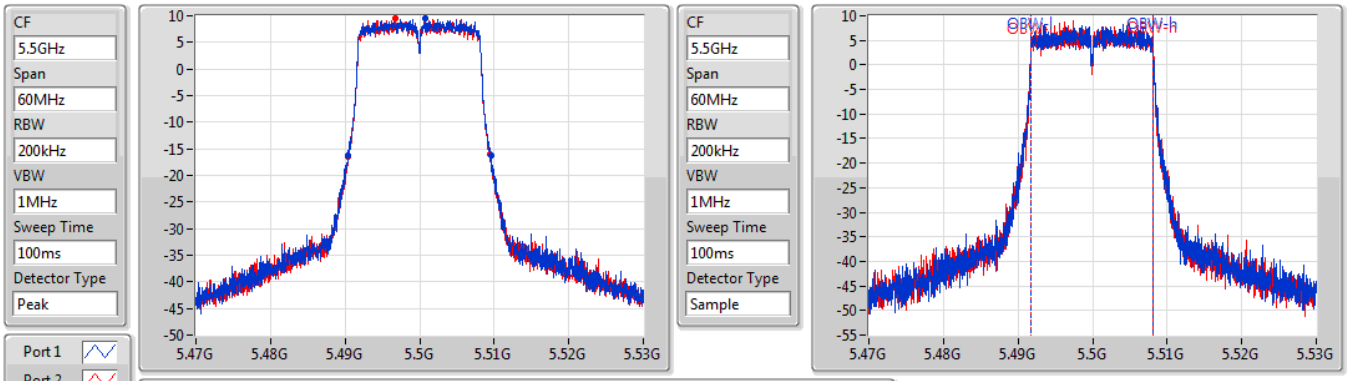
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.26M	5.3104G	5.32966G	16.372M	5.311754G	5.328126G	Inf	1
19.17M	5.3104G	5.32957G	16.372M	5.311754G	5.328126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

30/05/2019



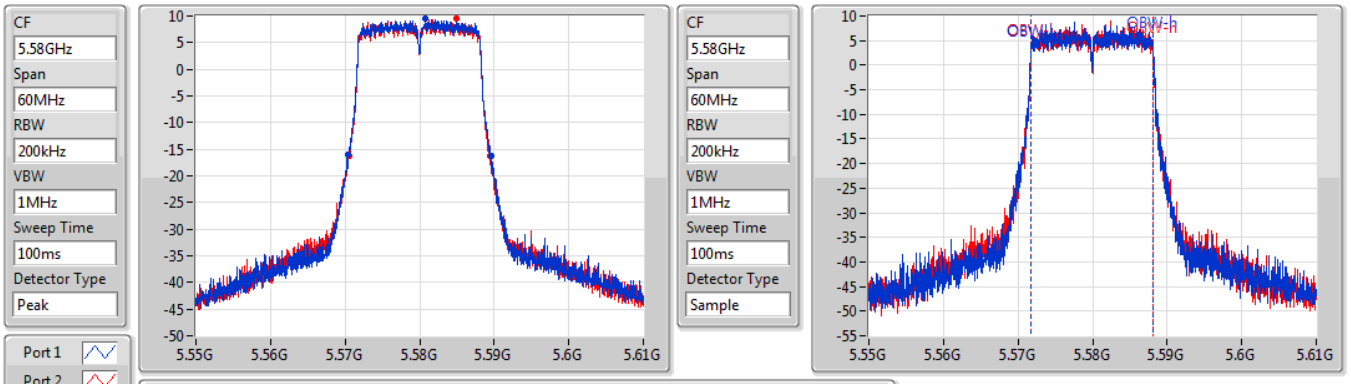
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.17M	5.49043G	5.5096G	16.372M	5.491754G	5.508126G	Inf	1
18.99M	5.49046G	5.50945G	16.432M	5.491724G	5.508156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

30/05/2019



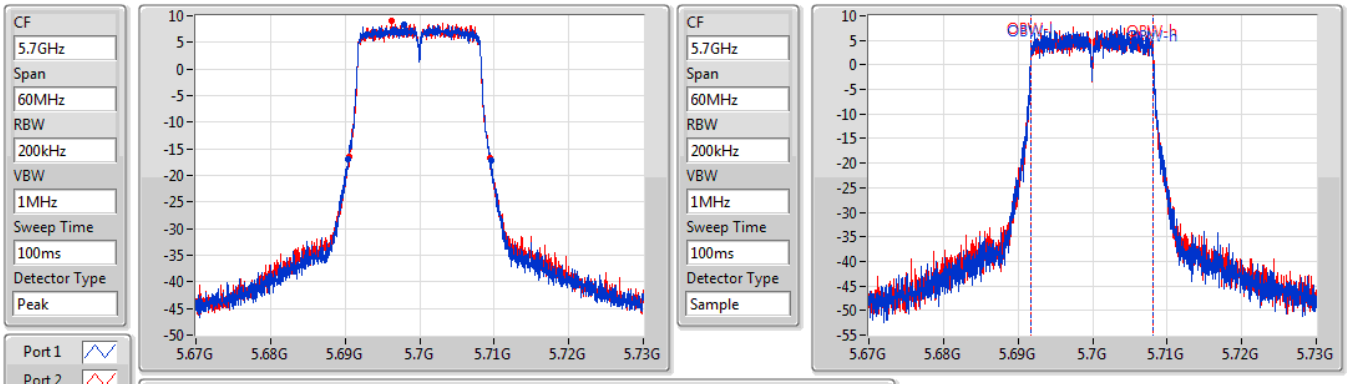
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.08M	5.57046G	5.58954G	16.402M	5.571724G	5.588126G	Inf	1
18.9M	5.57049G	5.58939G	16.402M	5.571724G	5.588126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

30/05/2019



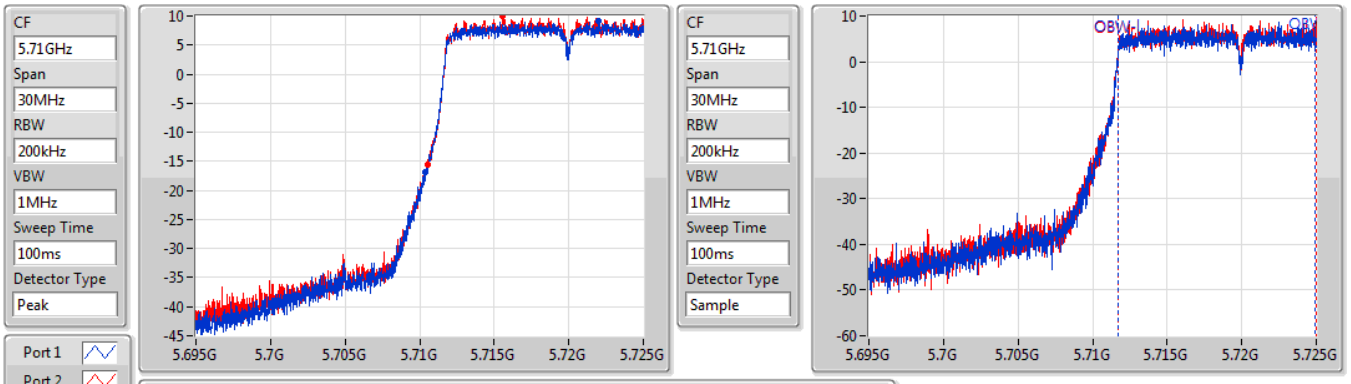
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.2M	5.6904G	5.7096G	16.402M	5.691724G	5.708126G	Inf	1
18.81M	5.69058G	5.70939G	16.432M	5.691724G	5.708156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

17/06/2019



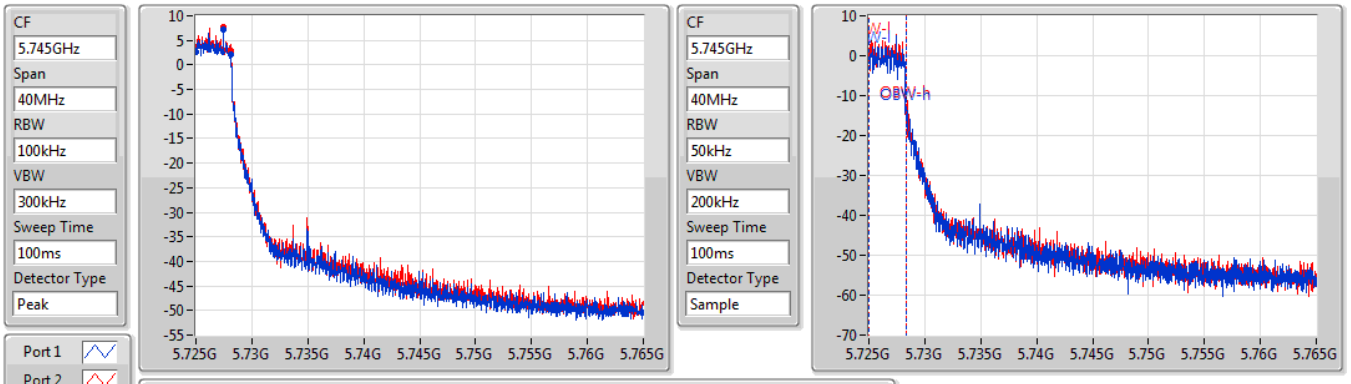
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.595M	5.710405G	5.725G	13.208M	5.711709G	5.724918G	Inf	1
14.49M	5.71051G	5.725G	13.253M	5.711709G	5.724963G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

17/06/2019



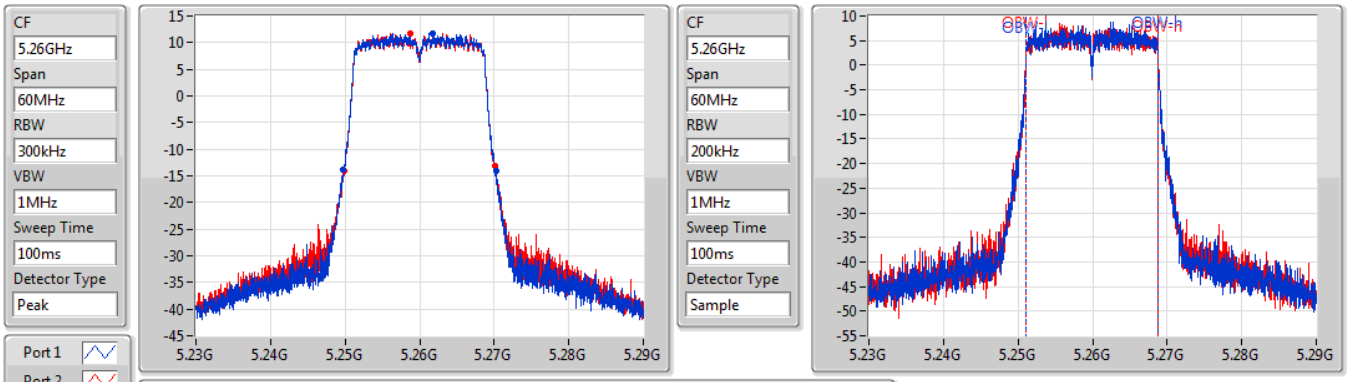
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.278M	5.72503G	5.728308G	500k	1
3.1M	5.725G	5.7281G	3.298M	5.72503G	5.728328G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5260MHz

30/05/2019



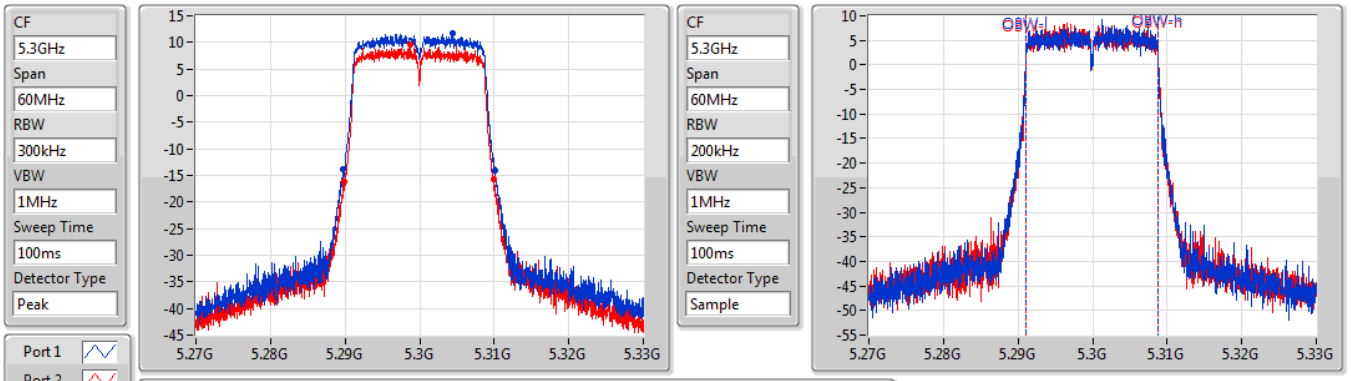
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.46M	5.24974G	5.2702G	17.601M	5.251124G	5.268726G	Inf	1
20.31M	5.24986G	5.27017G	17.631M	5.251124G	5.268756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5300MHz

30/05/2019



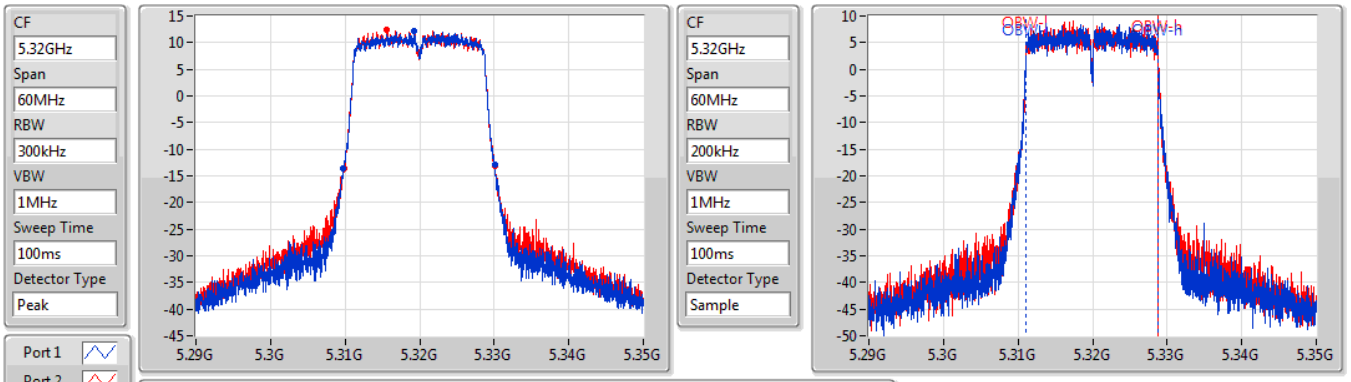
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.34M	5.28974G	5.31008G	17.601M	5.291124G	5.308726G	Inf	1
19.98M	5.28992G	5.3099G	17.601M	5.291124G	5.308726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5320MHz

30/05/2019



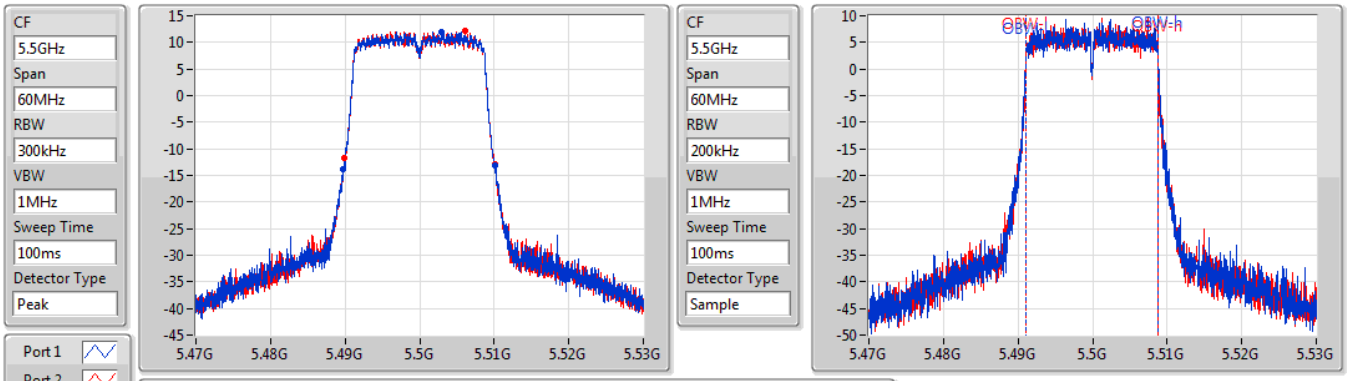
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.4M	5.30971G	5.33011G	17.631M	5.311124G	5.328756G	Inf	1
20.25M	5.30983G	5.33008G	17.631M	5.311124G	5.328756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5500MHz

30/05/2019



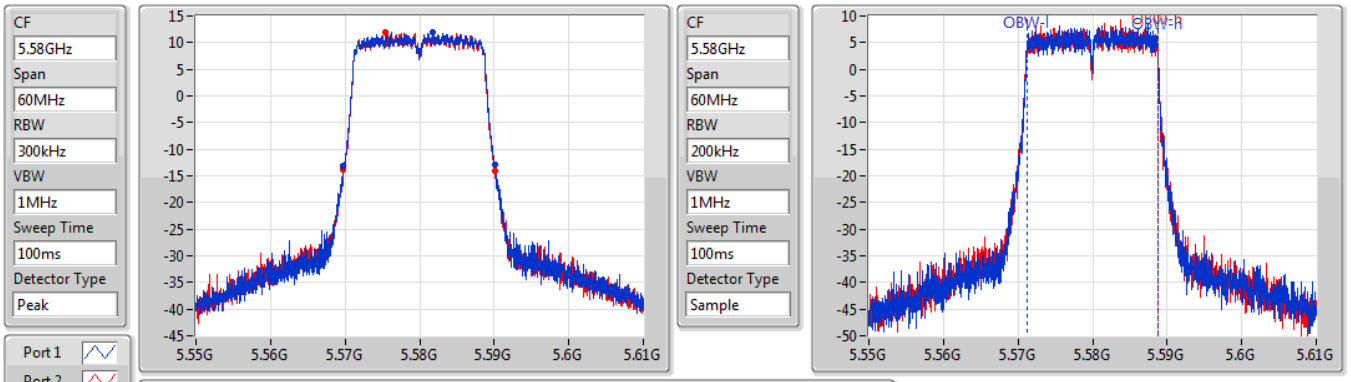
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.37M	5.4898G	5.51017G	17.601M	5.491124G	5.508726G	Inf	1
20.34M	5.48983G	5.51017G	17.601M	5.491124G	5.508726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5580MHz

30/05/2019



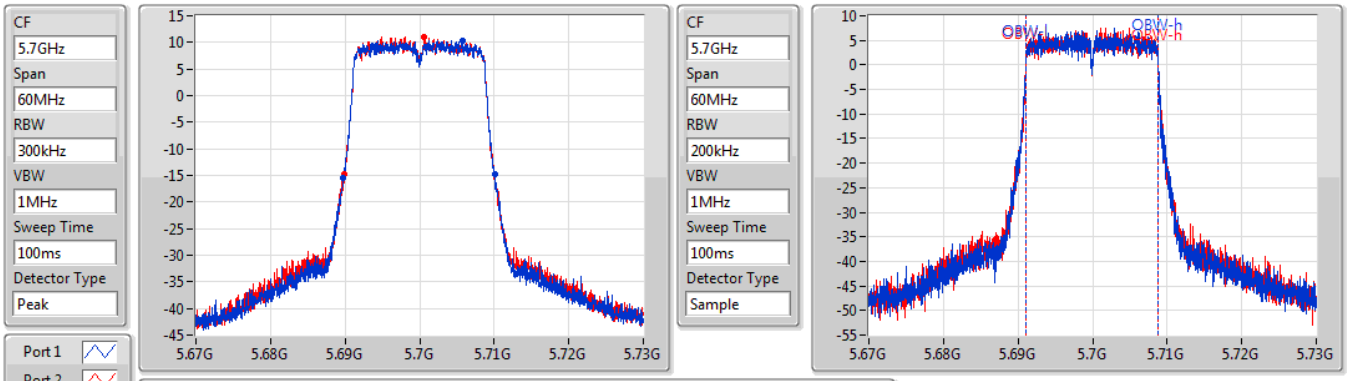
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.34M	5.5698G	5.59014G	17.571M	5.571154G	5.588726G	Inf	1
20.31M	5.5698G	5.59011G	17.571M	5.571154G	5.588726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5700MHz

30/05/2019



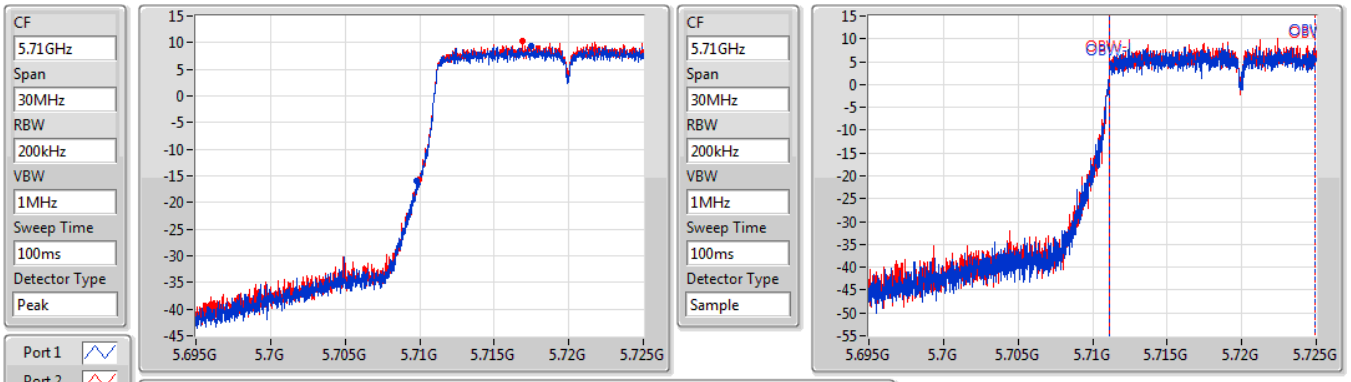
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.4M	5.68968G	5.71008G	17.601M	5.691124G	5.708726G	Inf	1
20.19M	5.68992G	5.71011G	17.601M	5.691124G	5.708726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

17/06/2019



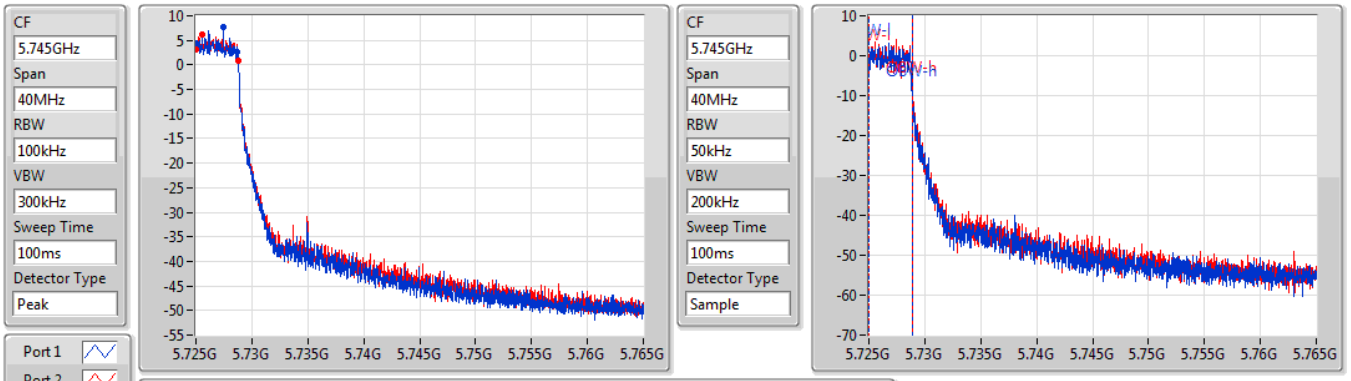
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.24M	5.70976G	5.725G	13.823M	5.711109G	5.724933G	Inf	1
15.045M	5.709955G	5.725G	13.808M	5.711124G	5.724933G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

17/06/2019

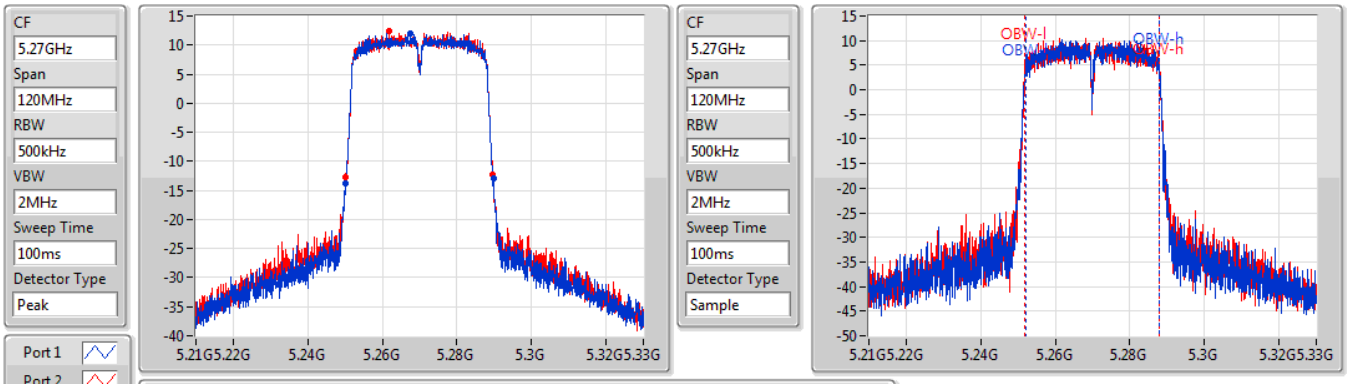


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.72M	5.725G	5.72872G	3.838M	5.72503G	5.728868G	500k	1
3.76M	5.725G	5.72876G	3.838M	5.72503G	5.728868G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5270MHz

30/05/2019

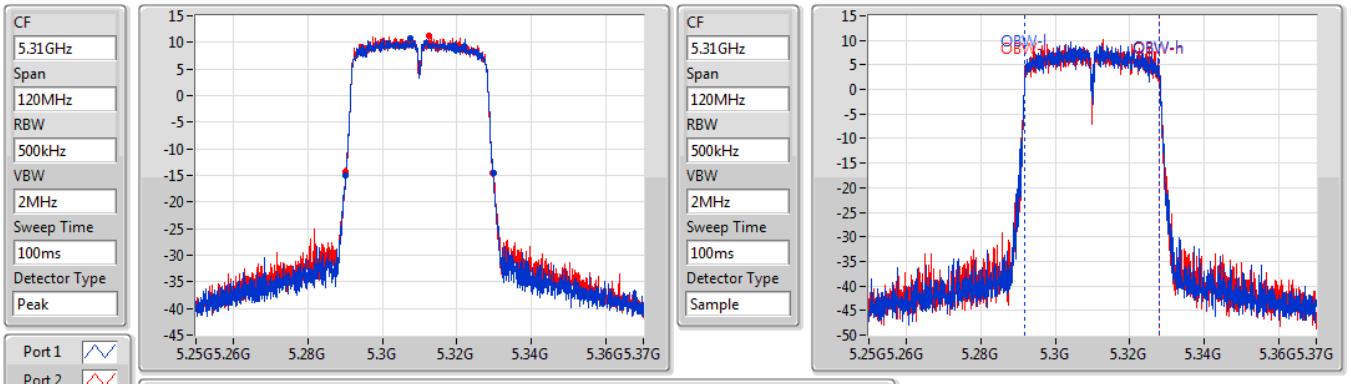


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.78M	5.24996G	5.28974G	35.922M	5.252009G	5.287931G	Inf	1
39.54M	5.25014G	5.28968G	36.042M	5.251889G	5.287931G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5310MHz

30/05/2019



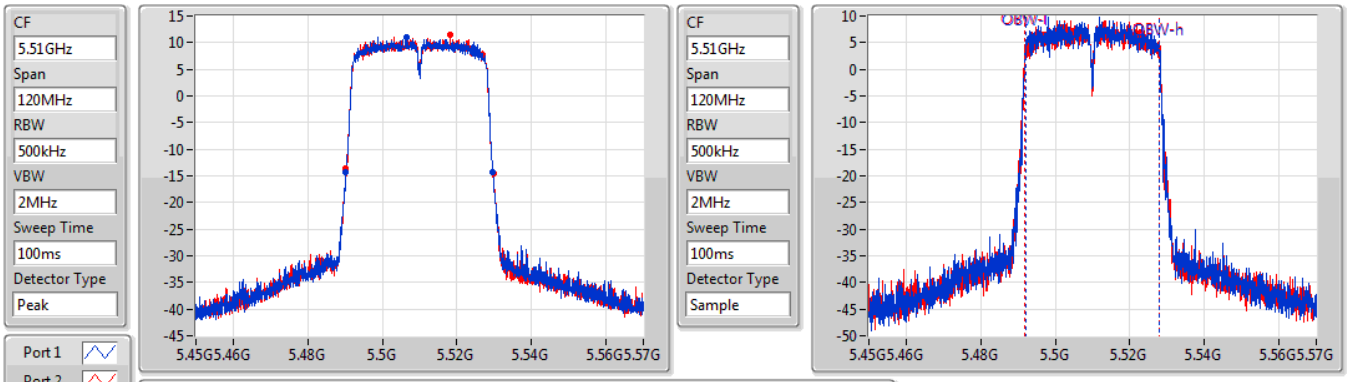
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.72M	5.29014G	5.32986G	35.982M	5.291949G	5.327931G	Inf	1
39.48M	5.2902G	5.32968G	35.982M	5.291889G	5.327871G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5510MHz

30/05/2019



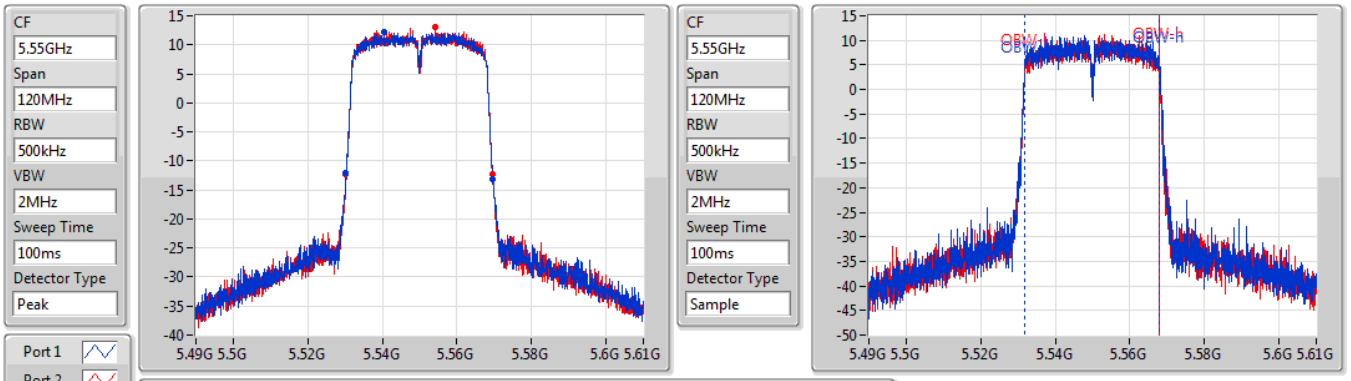
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.42M	5.49026G	5.52968G	35.922M	5.492009G	5.527931G	Inf	1
39.54M	5.4902G	5.52974G	35.982M	5.491949G	5.527931G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5550MHz

30/05/2019



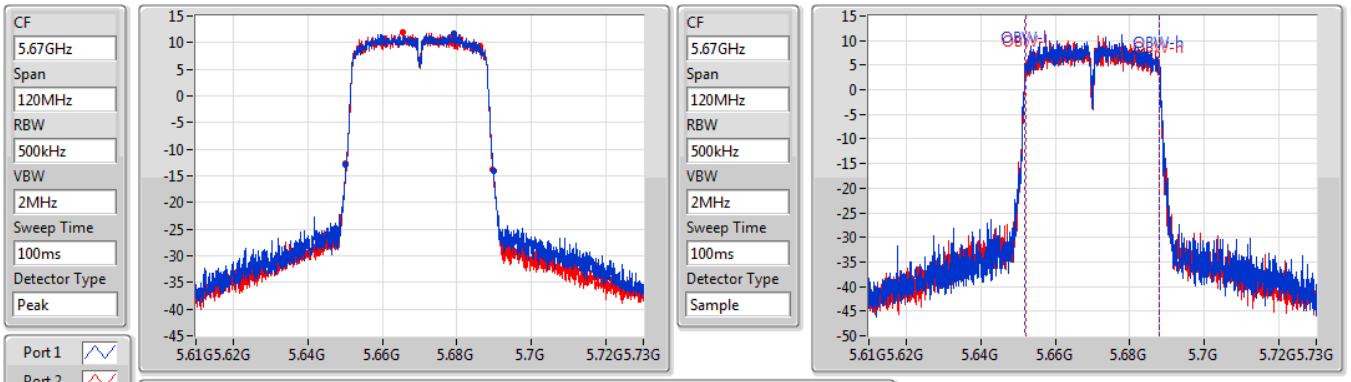
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.54M	5.53014G	5.56968G	36.042M	5.531889G	5.567931G	Inf	1
39.42M	5.5302G	5.56962G	35.922M	5.531949G	5.567871G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5670MHz

30/05/2019



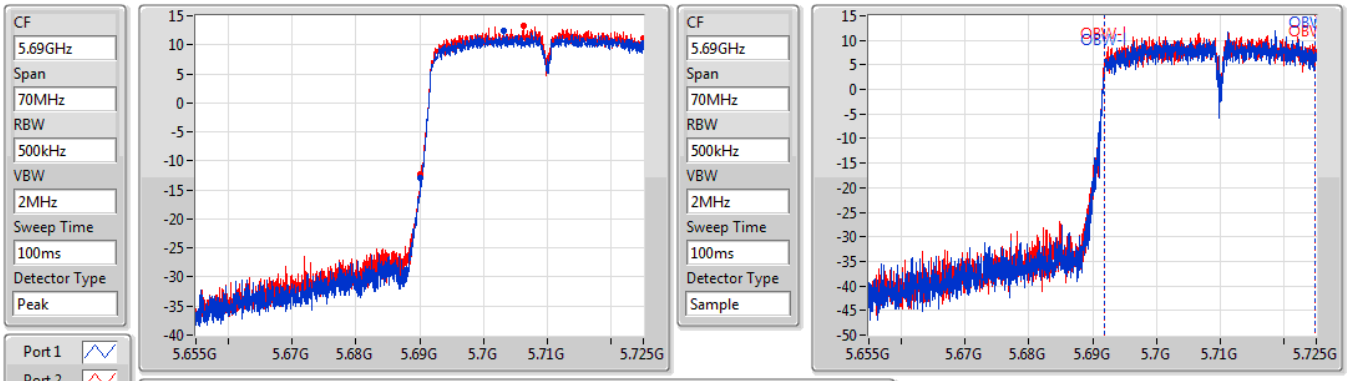
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.54M	5.65026G	5.6898G	35.982M	5.651949G	5.687931G	Inf	1
39.42M	5.65026G	5.68968G	35.922M	5.652009G	5.687931G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

17/06/2019



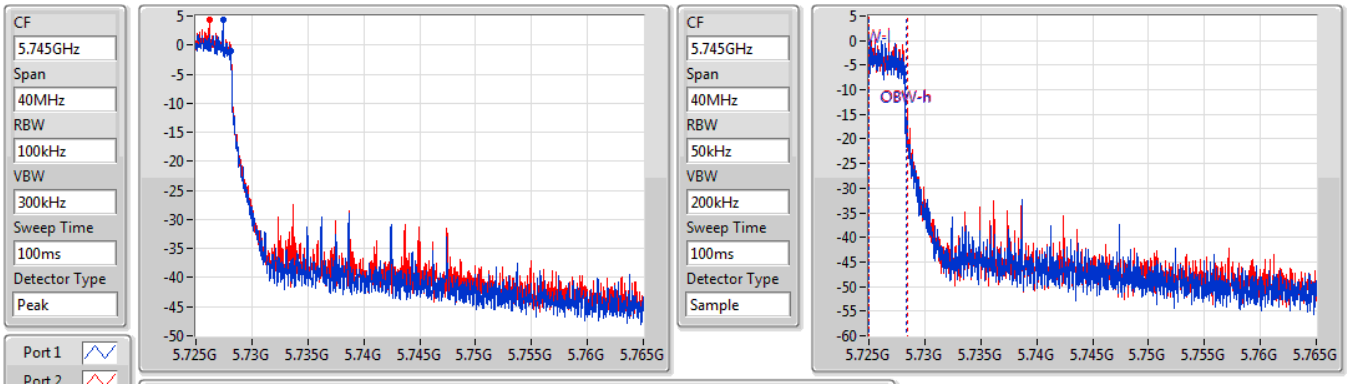
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.825M	5.690175G	5.725G	32.884M	5.691924G	5.724808G	Inf	1
34.86M	5.69014G	5.725G	32.919M	5.691889G	5.724808G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

17/06/2019



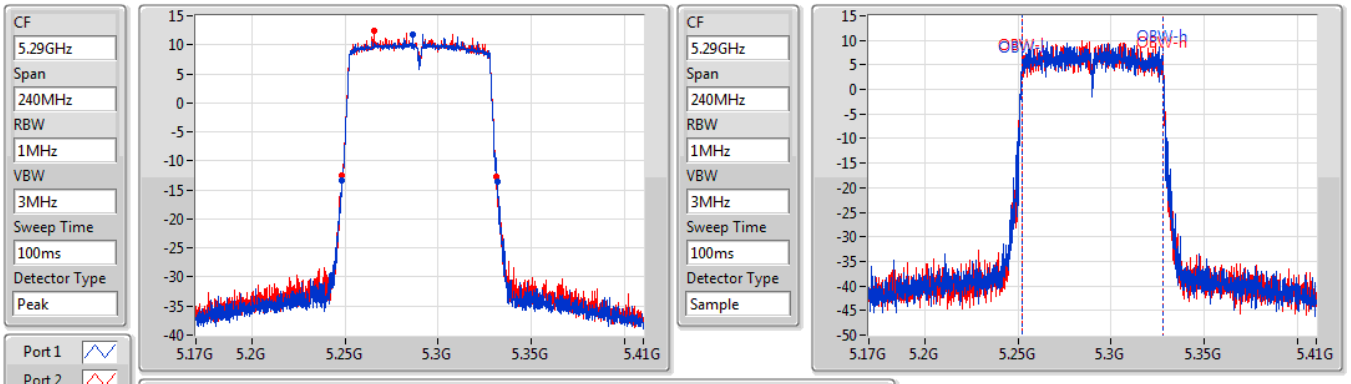
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.358M	5.72501G	5.728368G	500k	1
3.1M	5.725G	5.7281G	3.398M	5.72501G	5.728408G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

30/05/2019

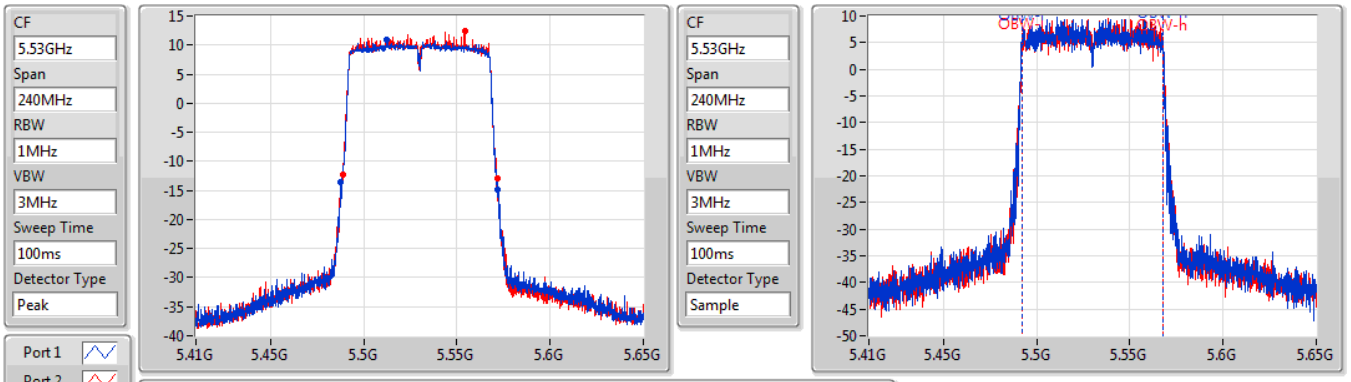


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.28M	5.24824G	5.33152G	75.682M	5.251979G	5.327661G	Inf	1
82.44M	5.24848G	5.33092G	75.562M	5.252099G	5.327661G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5530MHz

30/05/2019

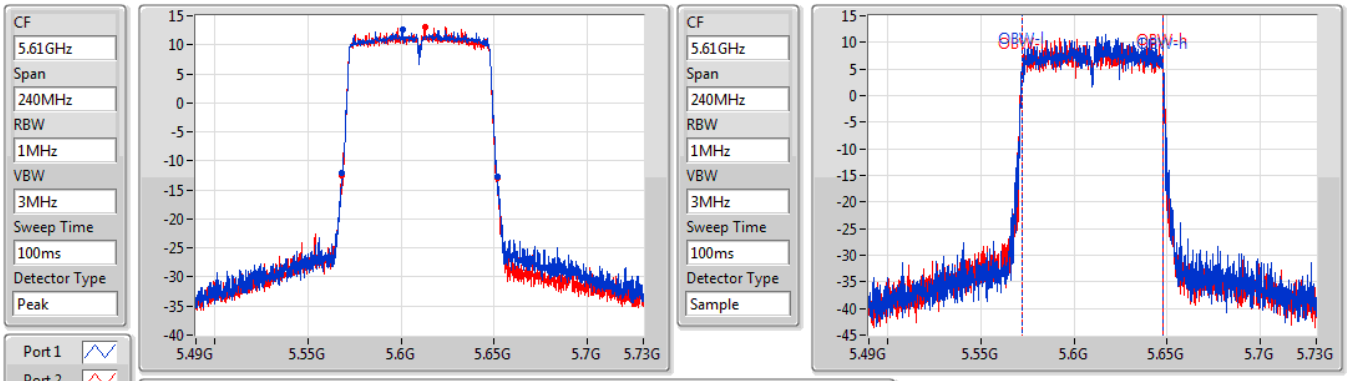


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.24M	5.48776G	5.572G	75.802M	5.491979G	5.567781G	Inf	1
83.04M	5.4886G	5.57164G	75.562M	5.492099G	5.567661G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5610MHz

30/05/2019



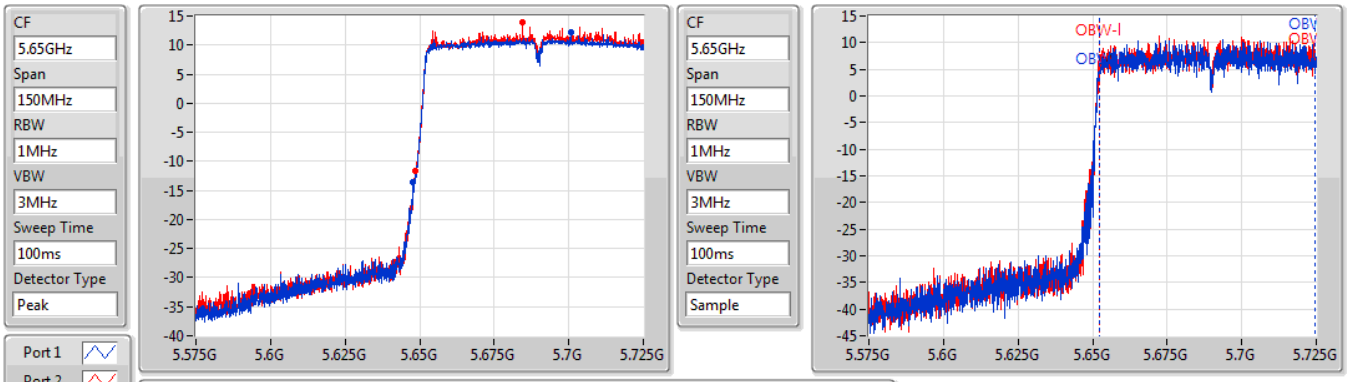
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.4M	5.56836G	5.65176G	75.682M	5.572099G	5.647781G	Inf	1
83.52M	5.56812G	5.65164G	75.802M	5.571979G	5.647781G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

17/06/2019



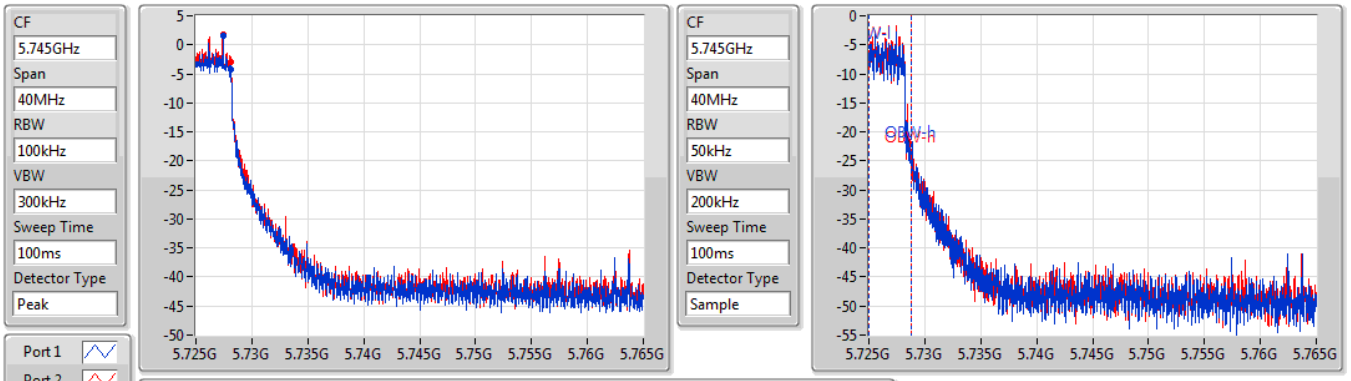
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.1M	5.6479G	5.725G	72.489M	5.652099G	5.724588G	Inf	1
76.65M	5.64835G	5.725G	72.489M	5.652099G	5.724588G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

17/06/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.798M	5.72503G	5.728828G	500k	1
3.1M	5.725G	5.7281G	3.738M	5.72501G	5.728748G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	22.97	0.19815
802.11ac VHT20_Nss1,(MCS0)_2TX	23.16	0.20701
802.11ac VHT40_Nss1,(MCS0)_2TX	23.66	0.23227
802.11ac VHT80_Nss1,(MCS0)_2TX	22.39	0.17338
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	22.82	0.19143
802.11ac VHT20_Nss1,(MCS0)_2TX	23.37	0.21727
802.11ac VHT40_Nss1,(MCS0)_2TX	23.98	0.25003
802.11ac VHT80_Nss1,(MCS0)_2TX	23.56	0.22699
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	15.73	0.03741
802.11ac VHT20_Nss1,(MCS0)_2TX	16.52	0.04487
802.11ac VHT40_Nss1,(MCS0)_2TX	12.27	0.01687
802.11ac VHT80_Nss1,(MCS0)_2TX	9.23	0.00838

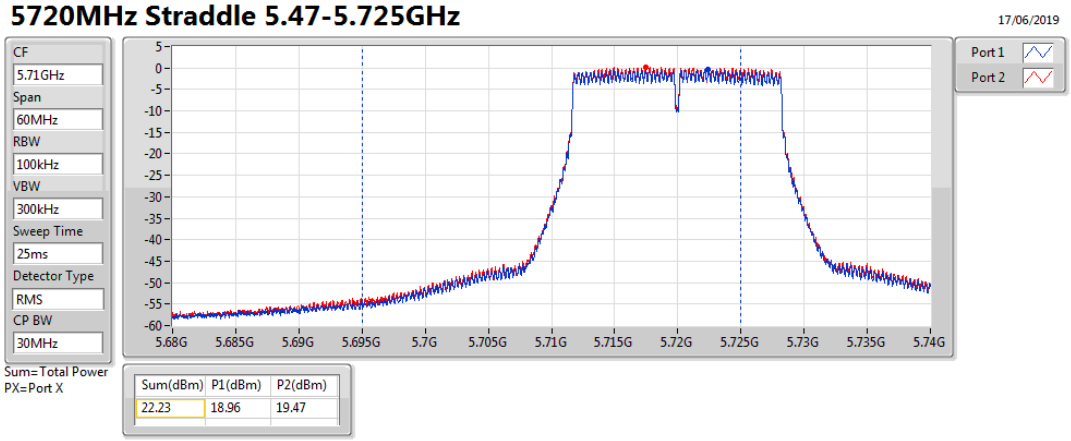
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50	19.97	19.87	22.93	23.81
5300MHz_TnomVnom	Pass	3.50	19.92	19.99	22.97	23.76
5320MHz_TnomVnom	Pass	3.50	19.70	19.80	22.76	23.83
5500MHz_TnomVnom	Pass	3.50	19.84	19.77	22.82	23.79
5580MHz_TnomVnom	Pass	3.50	19.73	19.62	22.69	23.76
5700MHz_TnomVnom	Pass	3.50	18.97	19.02	22.01	23.74
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	18.96	19.47	22.23	22.61
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	12.44	12.98	15.73	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50	20.03	19.85	22.95	24.00
5300MHz_TnomVnom	Pass	3.50	19.88	19.99	22.95	24.01
5320MHz_TnomVnom	Pass	3.50	20.09	20.21	23.16	24.00
5500MHz_TnomVnom	Pass	3.50	20.45	20.26	23.37	24.00
5580MHz_TnomVnom	Pass	3.50	20.32	20.06	23.20	24.00
5700MHz_TnomVnom	Pass	3.50	18.92	19.04	21.99	24.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	19.22	19.77	22.51	22.77
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	13.29	13.71	16.52	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	3.50	20.63	20.66	23.66	24.00
5310MHz_TnomVnom	Pass	3.50	19.51	19.57	22.55	24.00
5510MHz_TnomVnom	Pass	3.50	19.48	19.54	22.52	24.00
5550MHz_TnomVnom	Pass	3.50	21.01	20.89	23.96	24.00
5670MHz_TnomVnom	Pass	3.50	20.53	20.18	23.37	24.00
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	20.74	21.18	23.98	24.00
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	8.98	9.53	12.27	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	3.50	19.29	19.46	22.39	24.00
5530MHz_TnomVnom	Pass	3.50	19.36	19.38	22.38	24.00
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	20.32	20.77	23.56	24.00
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	5.84	6.56	9.23	30.00

DG = Directional Gain; **Port X** = Port X output power

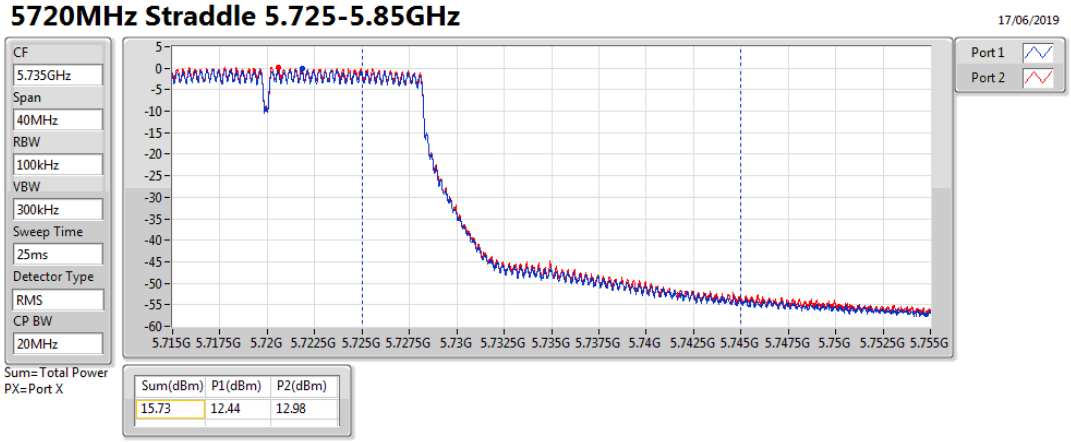
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



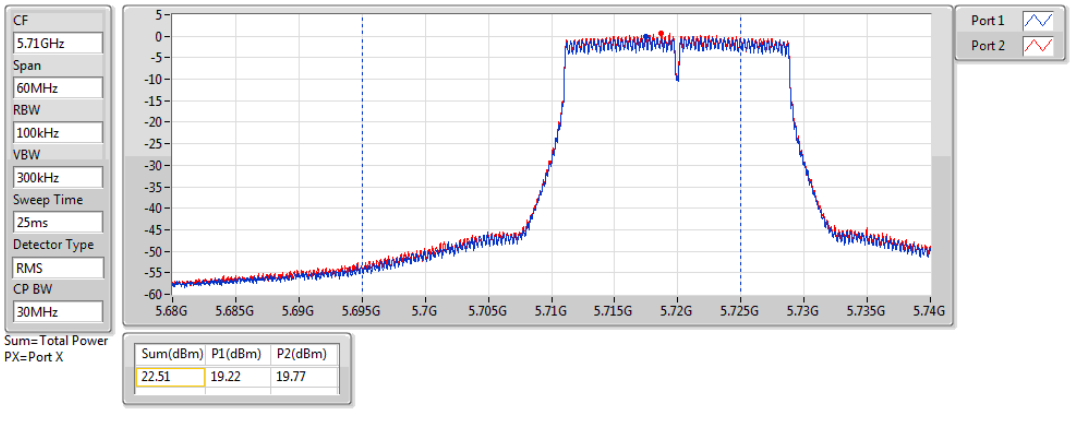
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



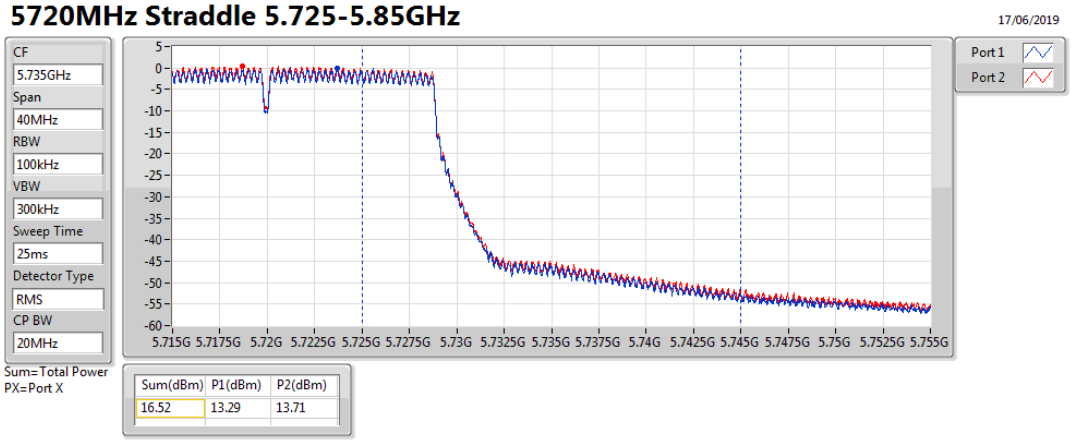
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



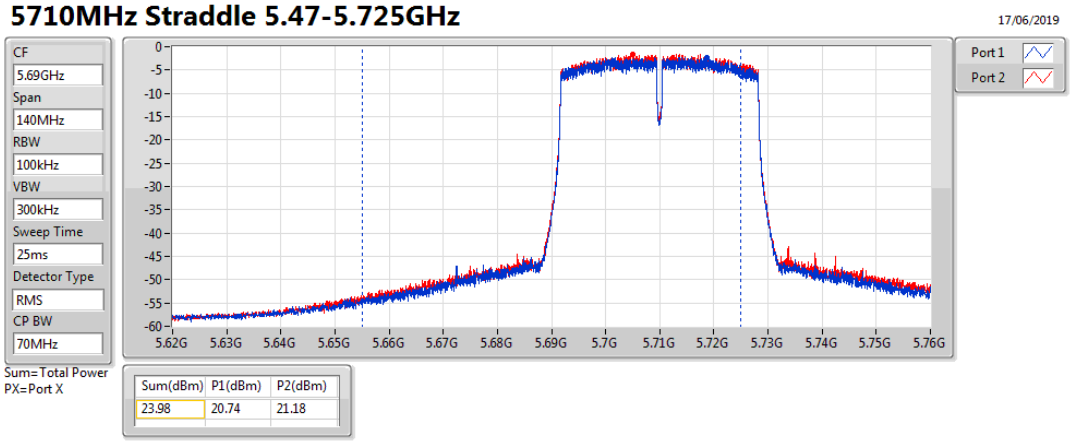
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



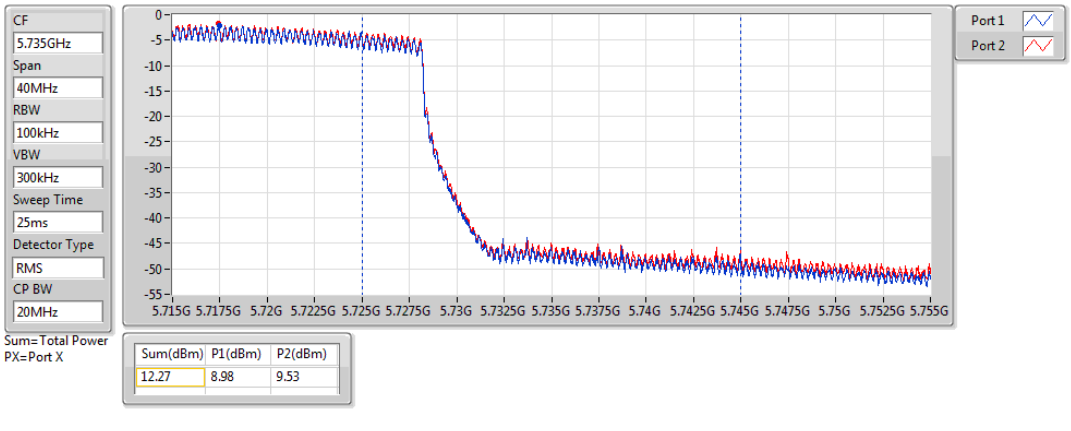
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz



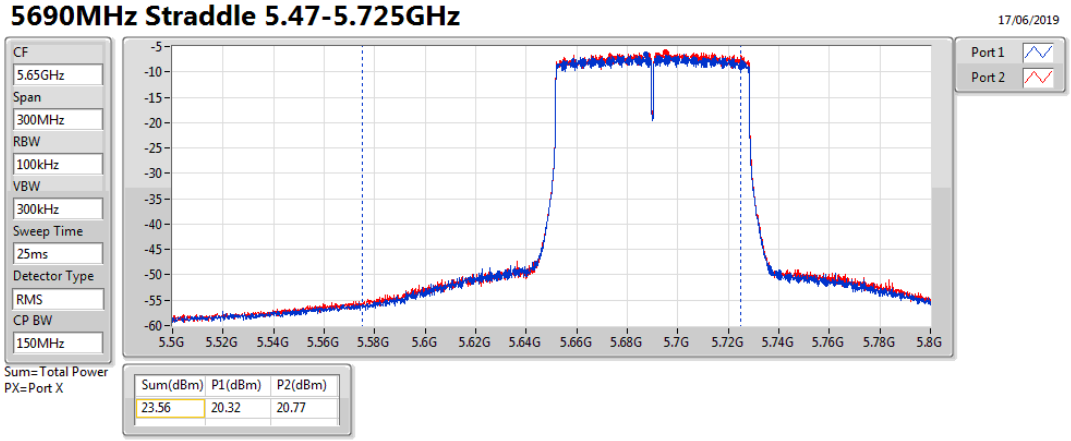
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz



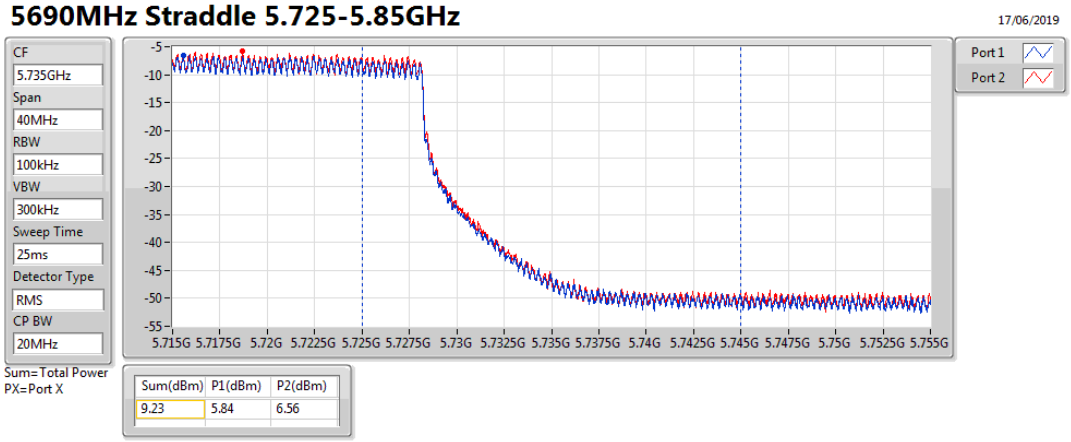
802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX(Port1)	19.97	0.09931	23.47	0.22233
802.11a_Nss1,(6Mbps)_2TX(Port2)	19.99	0.09977	23.49	0.22336
802.11ac VHT20_Nss1,(MCS0)_2TX(Port1)	20.09	0.10209	23.59	0.22856
802.11ac VHT20_Nss1,(MCS0)_2TX(Port2)	20.21	0.10495	23.71	0.23496
802.11ac VHT40_Nss1,(MCS0)_2TX(Port1)	20.63	0.11561	24.13	0.25882
802.11ac VHT40_Nss1,(MCS0)_2TX(Port2)	20.66	0.11641	24.16	0.26062
802.11ac VHT80_Nss1,(MCS0)_2TX(Port1)	19.29	0.08492	22.79	0.19011
802.11ac VHT80_Nss1,(MCS0)_2TX(Port2)	19.46	0.08831	22.96	0.19770
5.47-5.725GHz				
802.11a_Nss1,(6Mbps)_2TX(Port1)	19.84	0.09638	23.34	0.21577
802.11a_Nss1,(6Mbps)_2TX(Port2)	19.77	0.09484	23.27	0.21232
802.11ac VHT20_Nss1,(MCS0)_2TX(Port1)	20.45	0.11092	23.95	0.24831
802.11ac VHT20_Nss1,(MCS0)_2TX(Port2)	20.26	0.10617	23.76	0.23768
802.11ac VHT40_Nss1,(MCS0)_2TX(Port1)	21.01	0.12618	24.51	0.28249
802.11ac VHT40_Nss1,(MCS0)_2TX(Port2)	20.89	0.12274	24.39	0.27479
802.11ac VHT80_Nss1,(MCS0)_2TX(Port1)	20.76	0.11912	24.26	0.26669
802.11ac VHT80_Nss1,(MCS0)_2TX(Port2)	20.77	0.11940	24.27	0.26730
5.725-5.85GHz				
802.11a_Nss1,(6Mbps)_2TX(Port1)	12.44	0.01754	15.94	0.03926
802.11a_Nss1,(6Mbps)_2TX(Port2)	12.98	0.01986	16.48	0.04446
802.11ac VHT20_Nss1,(MCS0)_2TX(Port1)	13.29	0.02133	16.79	0.04775
802.11ac VHT20_Nss1,(MCS0)_2TX(Port2)	13.71	0.02350	17.21	0.05260
802.11ac VHT40_Nss1,(MCS0)_2TX(Port1)	8.98	0.00791	12.48	0.01770
802.11ac VHT40_Nss1,(MCS0)_2TX(Port2)	9.53	0.00897	13.03	0.02009
802.11ac VHT80_Nss1,(MCS0)_2TX(Port1)	5.84	0.00384	9.34	0.00859
802.11ac VHT80_Nss1,(MCS0)_2TX(Port2)	6.56	0.00453	10.06	0.01014

Result

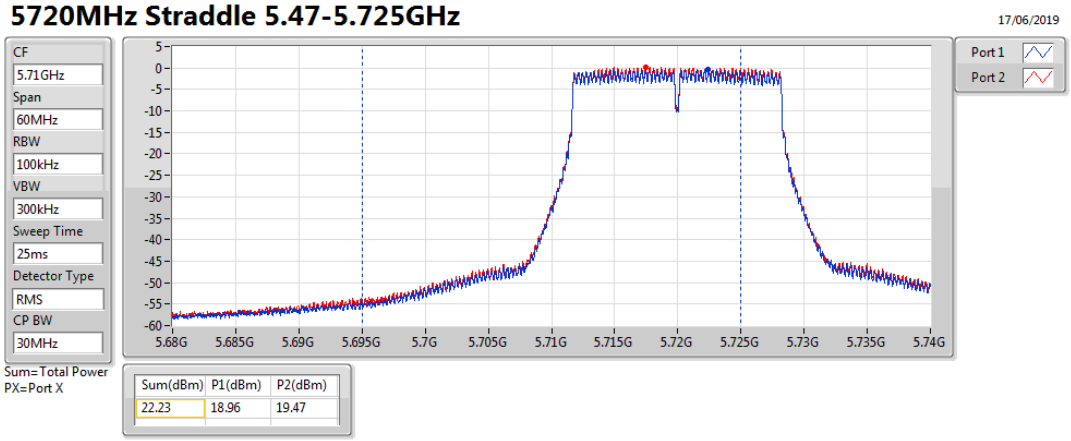
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX(Port1)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50	19.97		19.97	23.81	23.47	29.81
5300MHz_TnomVnom	Pass	3.50	19.92		19.92	23.76	23.42	29.76
5320MHz_TnomVnom	Pass	3.50	19.70		19.70	23.83	23.2	29.83
5500MHz_TnomVnom	Pass	3.50	19.84		19.84	23.79	23.34	29.79
5580MHz_TnomVnom	Pass	3.50	19.73		19.73	23.76	23.23	29.76
5700MHz_TnomVnom	Pass	3.50	18.97		18.97	23.74	22.47	29.74
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	18.96		18.96	22.61	22.46	28.61
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	12.44		12.44	30.00	15.94	36.00
802.11a_Nss1,(6Mbps)_2TX(Port2)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50		19.87	19.87	23.81	23.37	29.81
5300MHz_TnomVnom	Pass	3.50		19.99	19.99	23.76	23.49	29.76
5320MHz_TnomVnom	Pass	3.50		19.80	19.80	23.83	23.3	29.83
5500MHz_TnomVnom	Pass	3.50		19.77	19.77	23.79	23.27	29.79
5580MHz_TnomVnom	Pass	3.50		19.62	19.62	23.76	23.12	29.76
5700MHz_TnomVnom	Pass	3.50		19.02	19.02	23.74	22.52	29.74
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50		19.47	19.47	22.61	22.97	28.61
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50		12.98	12.98	30.00	16.48	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX(Port1)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50	20.03		20.03	24.00	23.53	30.00
5300MHz_TnomVnom	Pass	3.50	19.88		19.88	24.01	23.38	30.01
5320MHz_TnomVnom	Pass	3.50	20.09		20.09	24.00	23.59	30.00
5500MHz_TnomVnom	Pass	3.50	20.45		20.45	24.00	23.95	30.00
5580MHz_TnomVnom	Pass	3.50	20.32		20.32	24.00	23.82	30.00
5700MHz_TnomVnom	Pass	3.50	18.92		18.92	24.00	22.42	30.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	19.22		19.22	22.77	22.72	28.77
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	13.29		13.29	30.00	16.79	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX(Port2)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	3.50		19.85	19.85	24.00	23.35	30.00
5300MHz_TnomVnom	Pass	3.50		19.99	19.99	24.01	23.49	30.01
5320MHz_TnomVnom	Pass	3.50		20.21	20.21	24.00	23.71	30.00
5500MHz_TnomVnom	Pass	3.50		20.26	20.26	24.00	23.76	30.00
5580MHz_TnomVnom	Pass	3.50		20.06	20.06	24.00	23.56	30.00
5700MHz_TnomVnom	Pass	3.50		19.04	19.04	24.00	22.54	30.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50		19.77	19.77	22.77	23.27	28.77
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50		13.71	13.71	30.00	17.21	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX(Port1)	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	3.50	20.63		20.63	24.00	24.13	30.00
5310MHz_TnomVnom	Pass	3.50	19.51		19.51	24.00	23.01	30.00
5510MHz_TnomVnom	Pass	3.50	19.48		19.48	24.00	22.98	30.00
5550MHz_TnomVnom	Pass	3.50	21.01		21.01	24.00	24.51	30.00
5670MHz_TnomVnom	Pass	3.50	20.53		20.53	24.00	24.03	30.00
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	20.74		20.74	24.00	24.24	30.00
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	8.98		8.98	30.00	12.48	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT40_Nss1,(MCS0)_2TX(Port2)	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	3.50		20.66	20.66	24.00	24.16	30.00
5310MHz_TnomVnom	Pass	3.50		19.57	19.57	24.00	23.07	30.00
5510MHz_TnomVnom	Pass	3.50		19.54	19.54	24.00	23.04	30.00
5550MHz_TnomVnom	Pass	3.50		20.89	20.89	24.00	24.39	30.00
5670MHz_TnomVnom	Pass	3.50		20.18	20.18	24.00	23.68	30.00
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50		21.18	21.18	24.00	24.68	30.00
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50		9.53	9.53	30.00	13.03	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX(Port1)	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	3.50	19.29		19.29	24.00	22.79	30.00
5530MHz_TnomVnom	Pass	3.50	19.36		19.36	24.00	22.86	30.00
5610MHz_TnomVnom	Pass	3.50	20.76		20.76	24.00	24.26	30.00
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50	20.32		20.32	24.00	23.82	30.00
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50	5.84		5.84	30.00	9.34	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX(Port2)	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	3.50		19.46	19.46	24.00	22.96	30.00
5530MHz_TnomVnom	Pass	3.50		19.38	19.38	24.00	22.88	30.00
5610MHz_TnomVnom	Pass	3.50		20.45	20.45	24.00	23.95	30.00
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	3.50		20.77	20.77	24.00	24.27	30.00
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	3.50		6.56	6.56	30.00	10.06	36.00

DG = Directional Gain; **Port X** = Port X output power

802.11a_Nss1,(6Mbps)_2TX **AV Power**

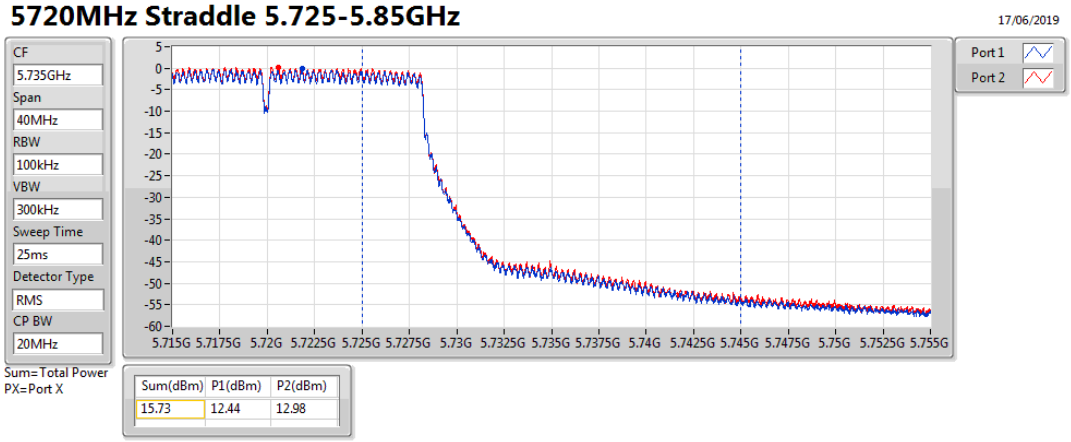
5720MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)
22.23	18.96	19.47

802.11a_Nss1,(6Mbps)_2TX **AV Power**

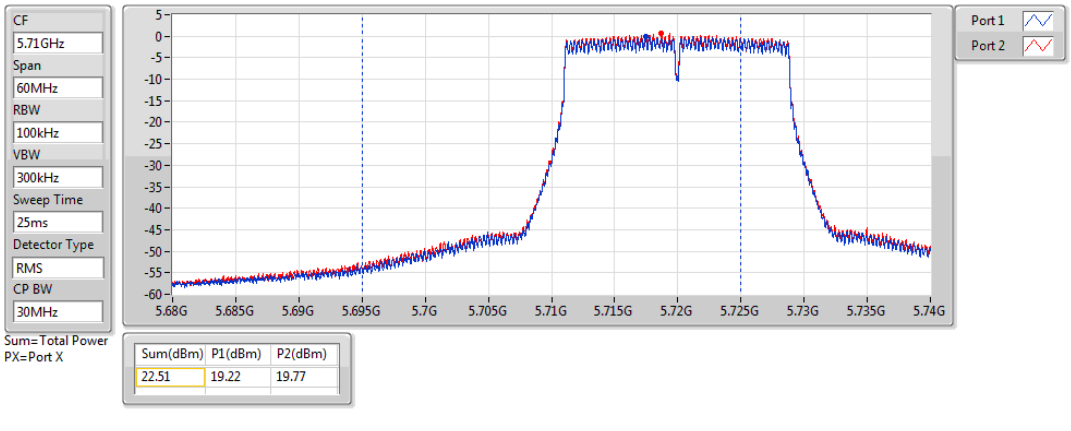
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)
15.73	12.44	12.98

802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

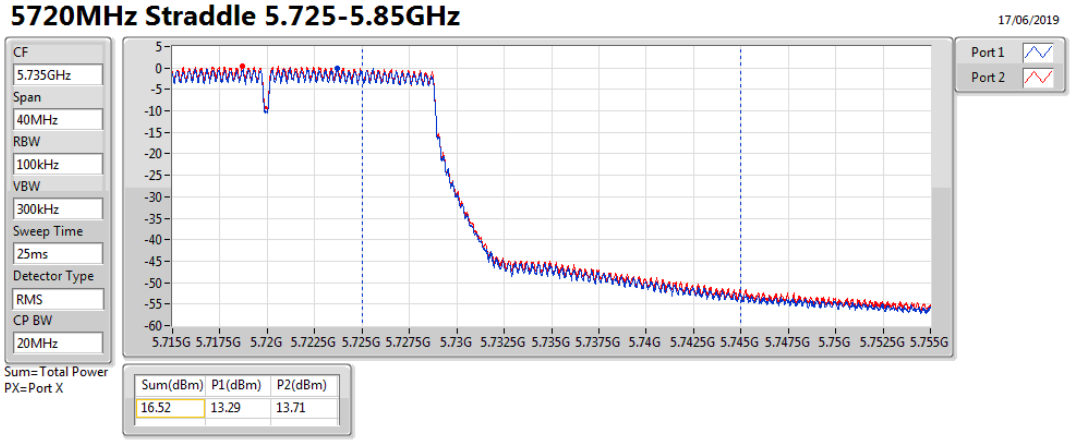
5720MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)
22.51	19.22	19.77

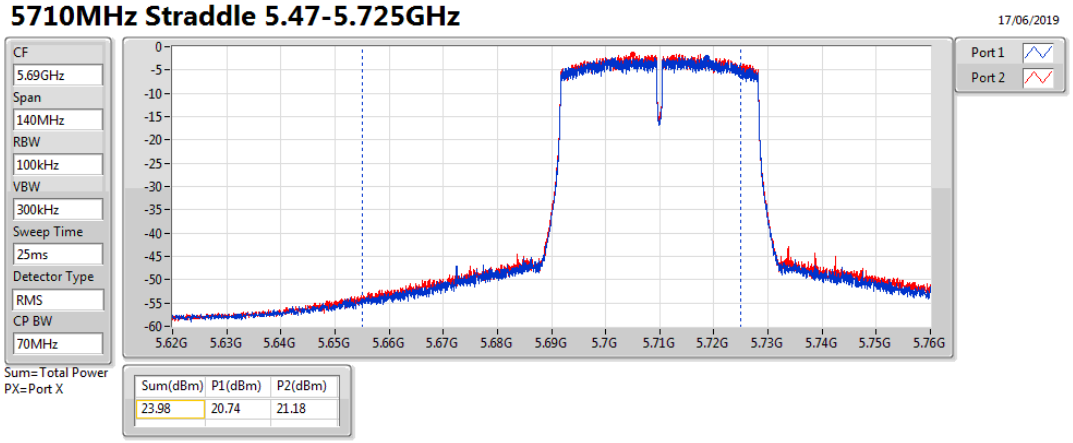
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



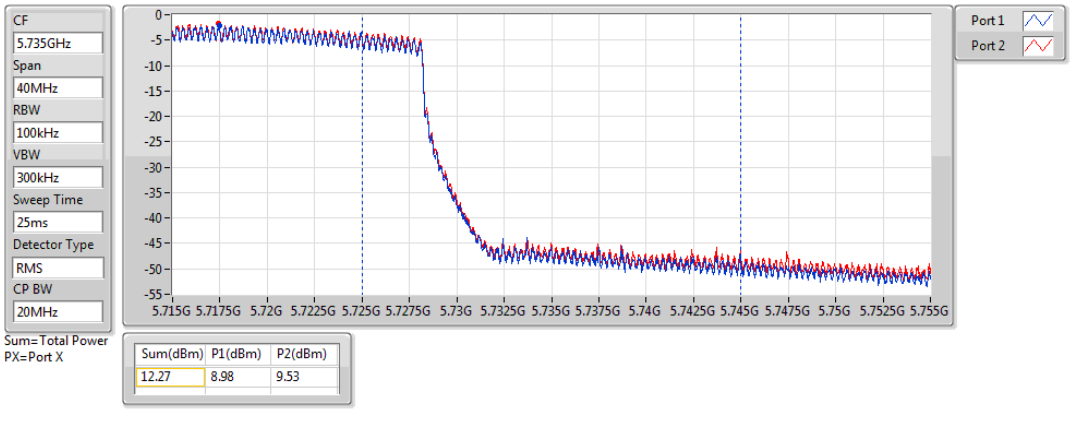
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz



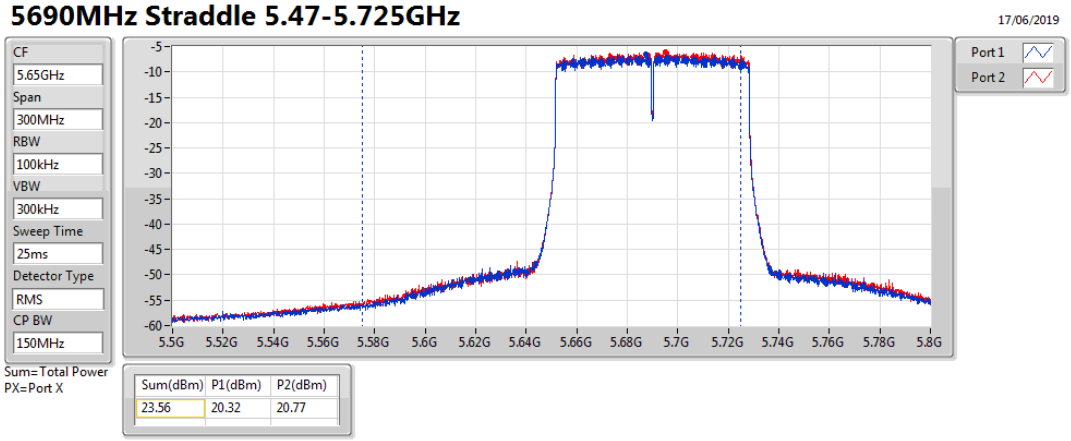
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz



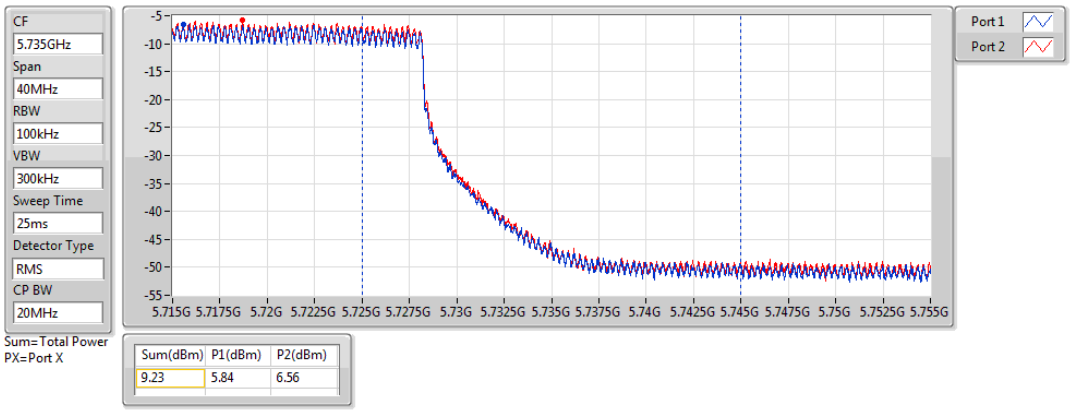
802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	10.34	13.84
802.11ac VHT20_Nss1,(MCS0)_2TX	10.37	13.87
802.11ac VHT40_Nss1,(MCS0)_2TX	8.07	11.57
802.11ac VHT80_Nss1,(MCS0)_2TX	3.49	6.99
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	10.12	13.62
802.11ac VHT20_Nss1,(MCS0)_2TX	10.48	13.98
802.11ac VHT40_Nss1,(MCS0)_2TX	8.39	11.89
802.11ac VHT80_Nss1,(MCS0)_2TX	4.67	8.17
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	8.35	11.85
802.11ac VHT20_Nss1,(MCS0)_2TX	8.41	11.91
802.11ac VHT40_Nss1,(MCS0)_2TX	5.09	8.59
802.11ac VHT80_Nss1,(MCS0)_2TX	1.76	5.26

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

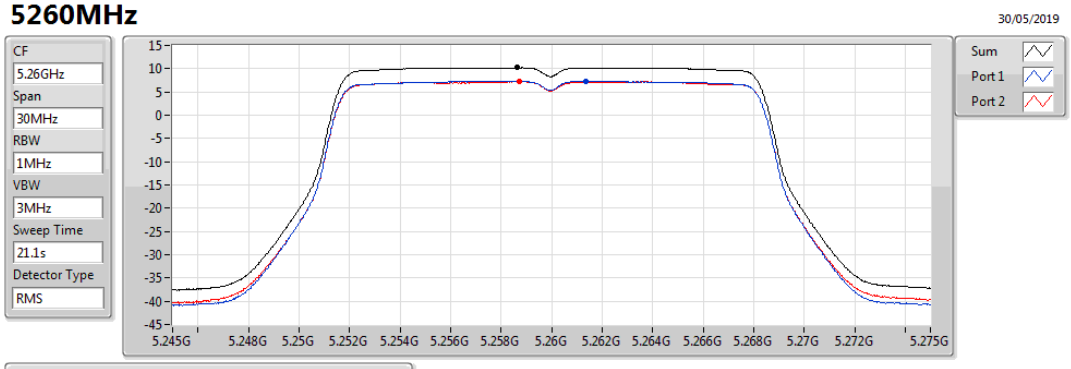
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	6.51	7.25	7.20	10.21	10.49	13.71	17.00
5300MHz_TnomVnom	Pass	6.51	7.28	7.38	10.34	10.49	13.84	17.00
5320MHz_TnomVnom	Pass	6.51	7.06	7.13	10.08	10.49	13.58	17.00
5500MHz_TnomVnom	Pass	6.51	7.18	7.10	10.12	10.49	13.62	17.00
5580MHz_TnomVnom	Pass	6.51	7.18	7.02	10.10	10.49	13.60	17.00
5700MHz_TnomVnom	Pass	6.51	6.34	6.29	9.30	10.49	12.80	17.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	6.51	6.83	7.33	10.06	10.49	13.56	17.00
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	6.51	5.02	5.68	8.35	29.49	11.85	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	6.51	7.21	6.99	10.07	10.49	13.57	17.00
5300MHz_TnomVnom	Pass	6.51	7.21	7.16	10.15	10.49	13.65	17.00
5320MHz_TnomVnom	Pass	6.51	7.37	7.46	10.37	10.49	13.87	17.00
5500MHz_TnomVnom	Pass	6.51	7.61	7.43	10.48	10.49	13.98	17.00
5580MHz_TnomVnom	Pass	6.51	7.49	7.34	10.36	10.49	13.86	17.00
5700MHz_TnomVnom	Pass	6.51	6.00	6.21	9.07	10.49	12.57	17.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	6.51	6.97	7.66	10.29	10.49	13.79	17.00
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	6.51	5.17	5.65	8.41	29.49	11.91	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	6.51	5.06	5.07	8.07	10.49	11.57	17.00
5310MHz_TnomVnom	Pass	6.51	4.00	4.05	7.04	10.49	10.54	17.00
5510MHz_TnomVnom	Pass	6.51	4.00	3.87	6.94	10.49	10.44	17.00
5550MHz_TnomVnom	Pass	6.51	5.44	5.32	8.39	10.49	11.89	17.00
5670MHz_TnomVnom	Pass	6.51	4.82	4.61	7.72	10.49	11.22	17.00
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	6.51	5.07	5.59	8.33	10.49	11.83	17.00
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	6.51	1.84	2.32	5.09	29.49	8.59	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	6.51	0.43	0.54	3.49	10.49	6.99	17.00
5530MHz_TnomVnom	Pass	6.51	0.31	0.32	3.32	10.49	6.82	17.00
5610MHz_TnomVnom	Pass	6.51	1.90	1.48	4.67	10.49	8.17	17.00
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	6.51	1.01	1.50	4.26	10.49	7.76	17.00
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	6.51	-1.58	-0.93	1.76	29.49	5.26	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_2TX PSD

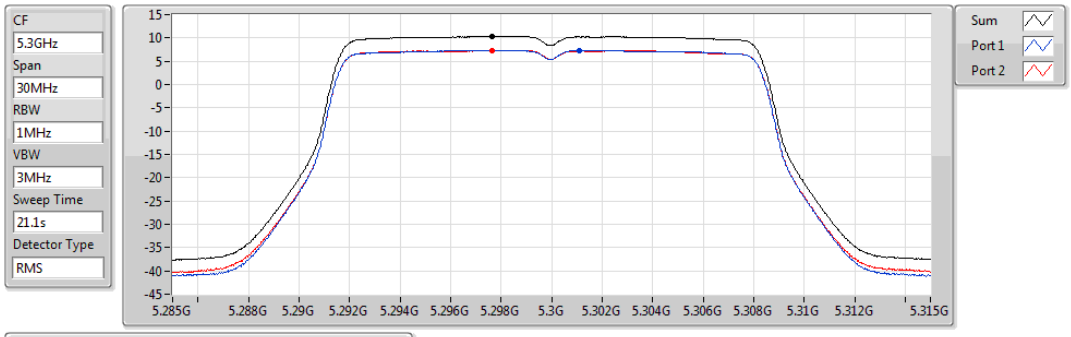
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.21	10.21	7.25	7.20

802.11a_Nss1,(6Mbps)_2TX PSD

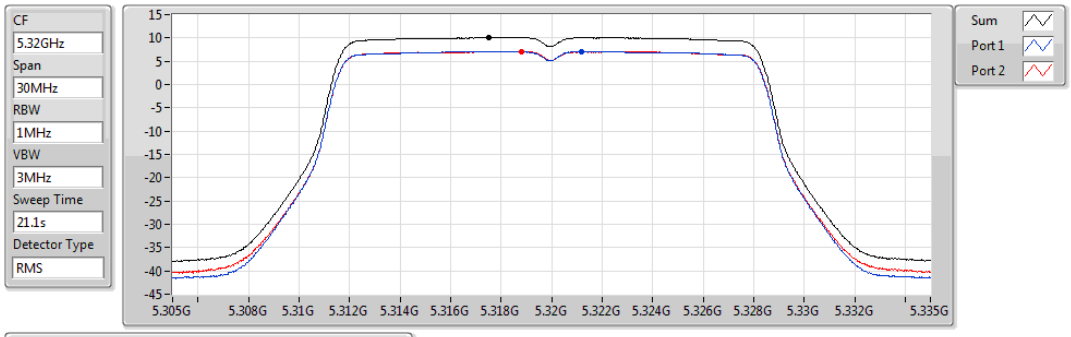
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.34	10.34	7.28	7.38

802.11a_Nss1,(6Mbps)_2TX PSD

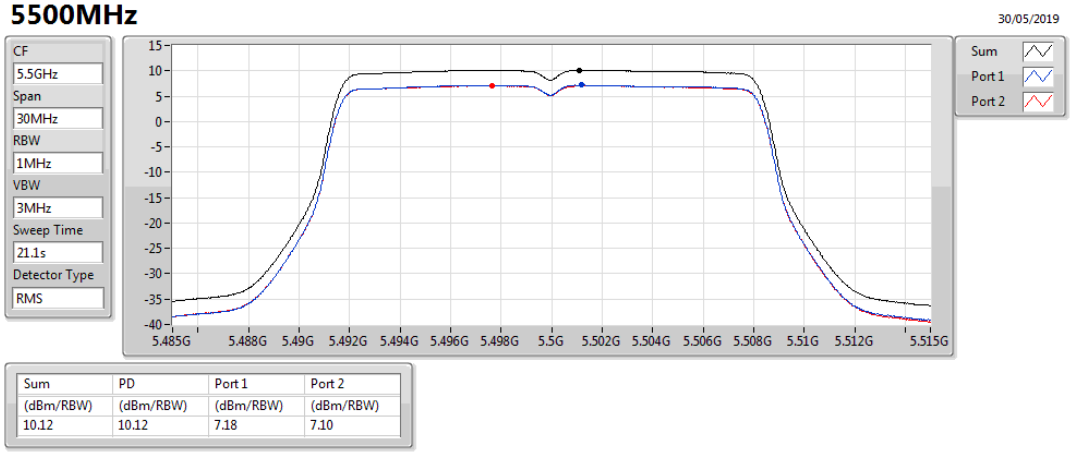
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.08	10.08	7.06	7.13

802.11a_Nss1,(6Mbps)_2TX PSD

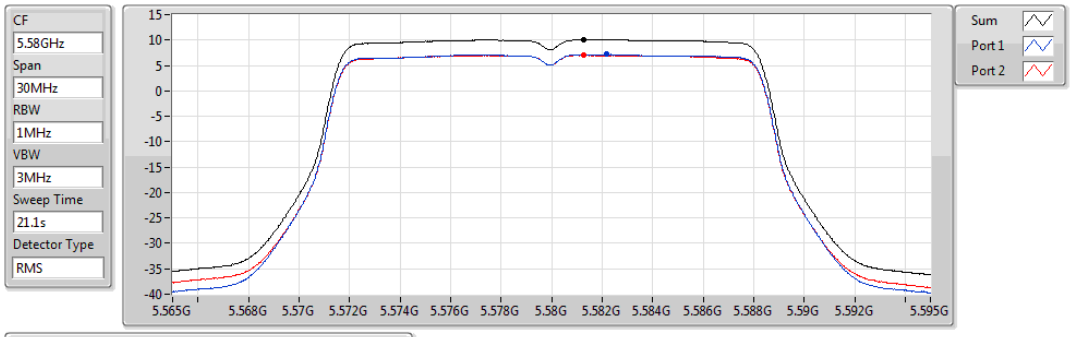
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.12	10.12	7.18	7.10

802.11a_Nss1,(6Mbps)_2TX PSD

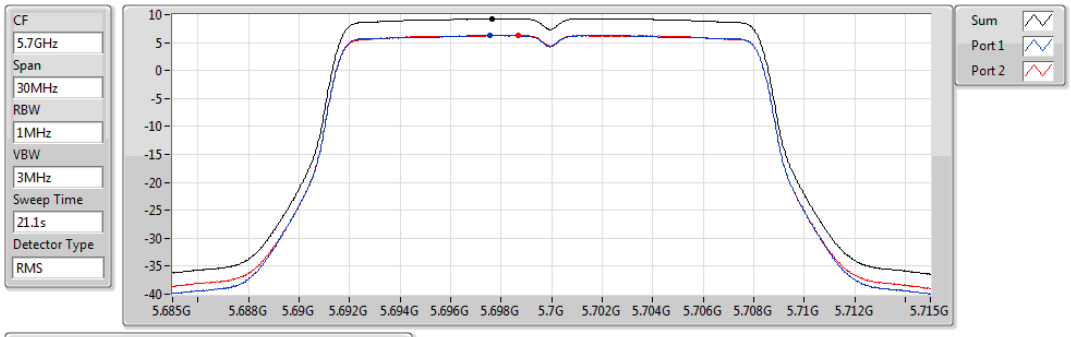
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.10	10.10	7.18	7.02

802.11a_Nss1,(6Mbps)_2TX PSD

5700MHz

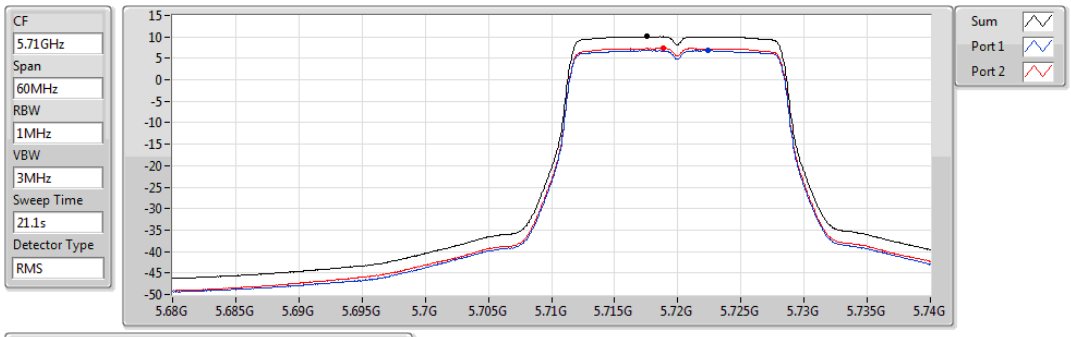


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.30	9.30	6.34	6.29

802.11a_Nss1,(6Mbps)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

17/06/2019

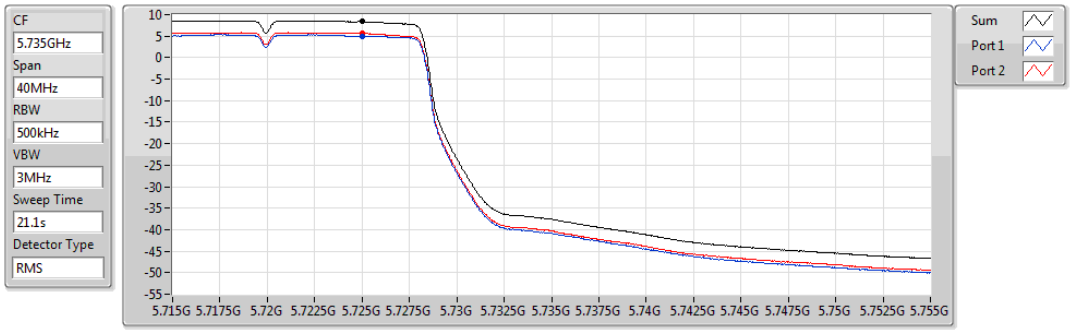


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.06	10.06	6.83	7.33

802.11a_Nss1,(6Mbps)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

17/06/2019

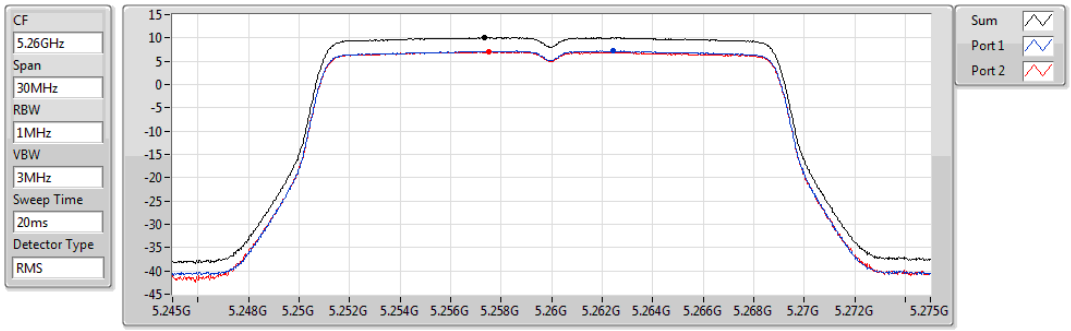


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.35	8.35	5.02	5.68

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

5260MHz

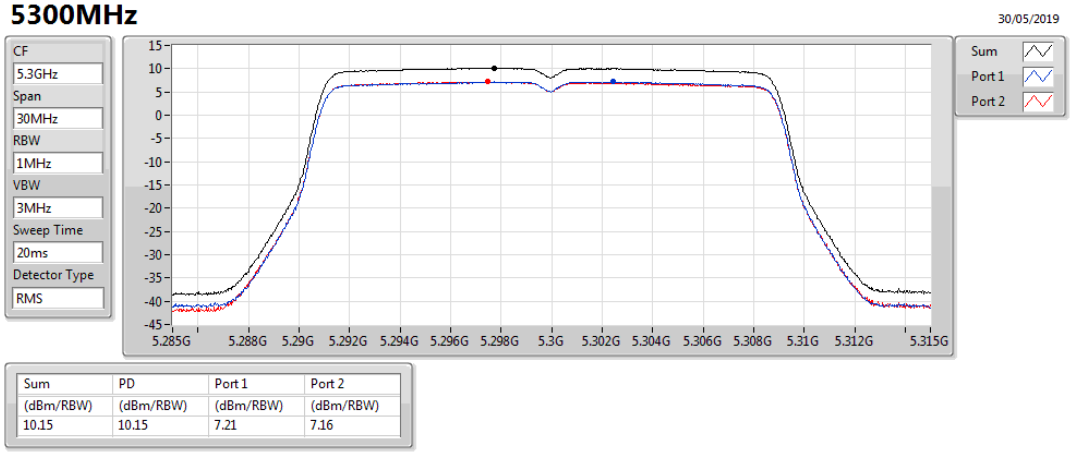
30/05/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.07	10.07	7.21	6.99

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

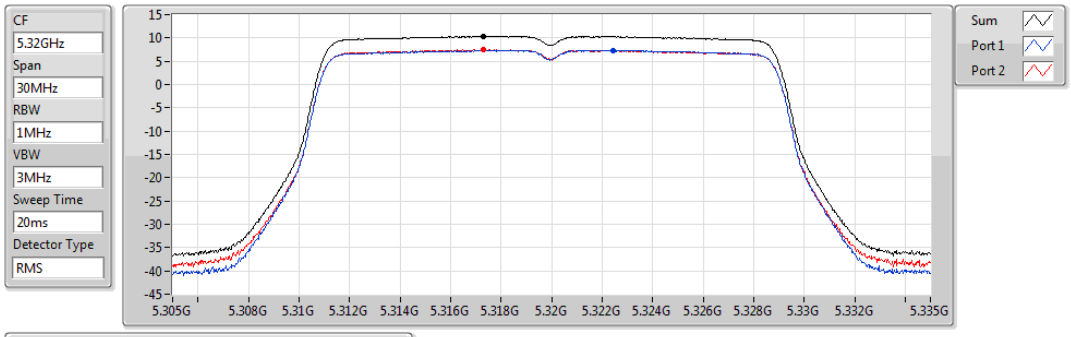
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.15	10.15	7.21	7.16

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

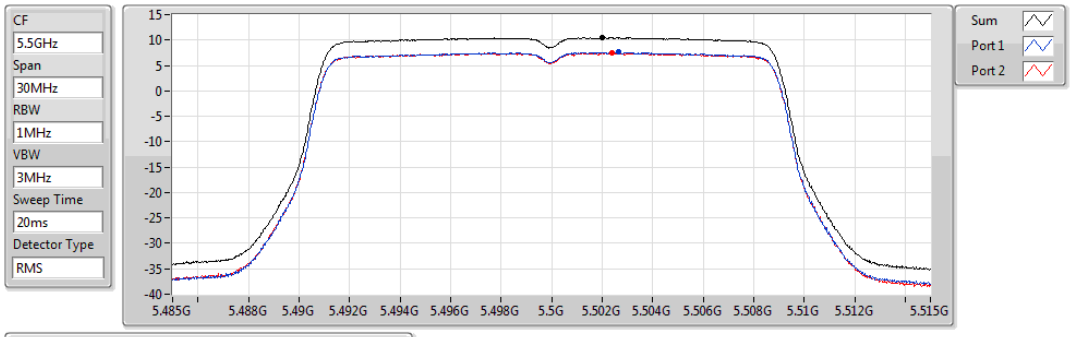
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.37	10.37	7.37	7.46

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

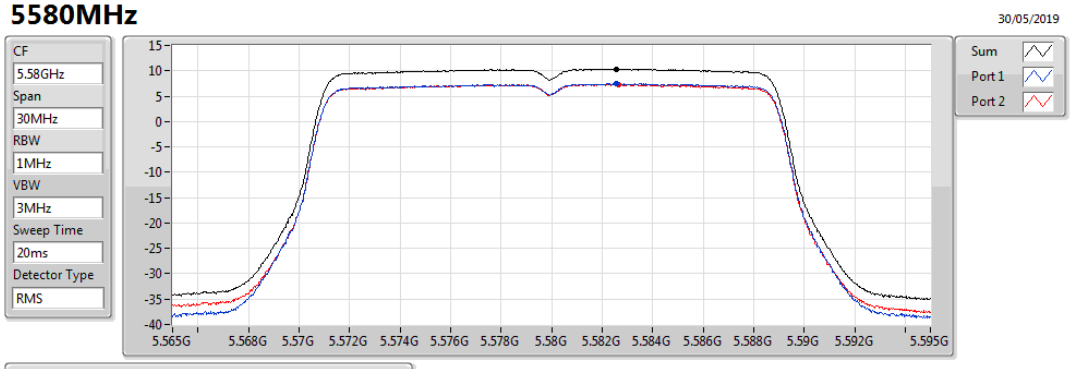
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.48	10.48	7.61	7.43

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

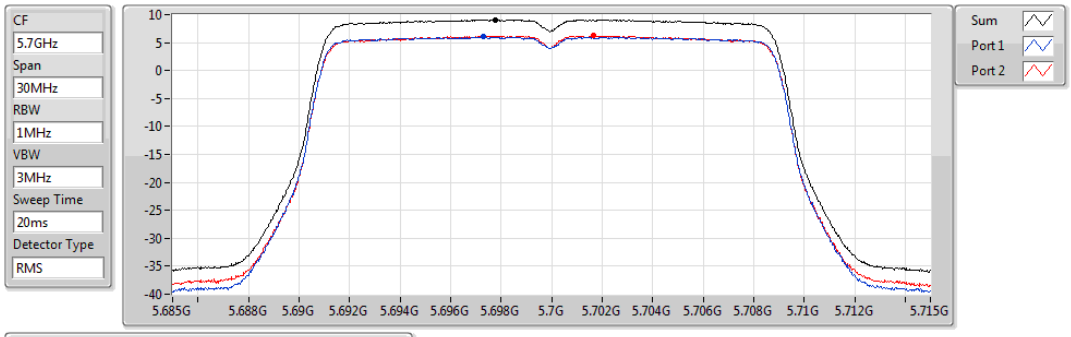
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.36	10.36	7.49	7.34

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

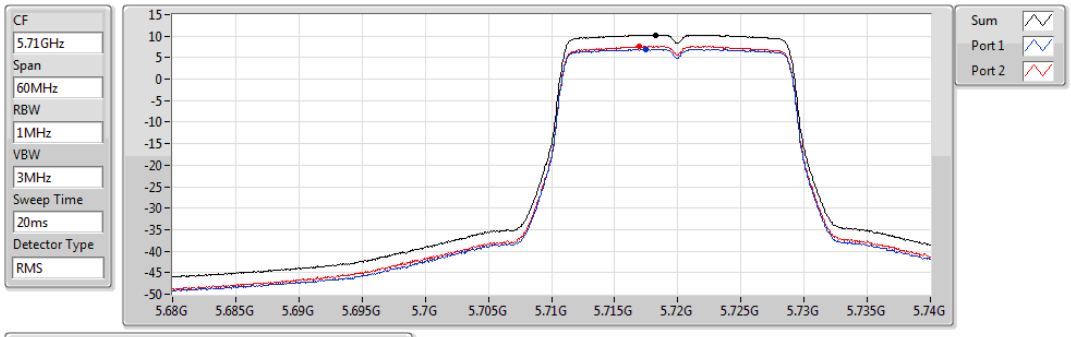
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.07	9.07	6.00	6.21

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.47-5.725GHz

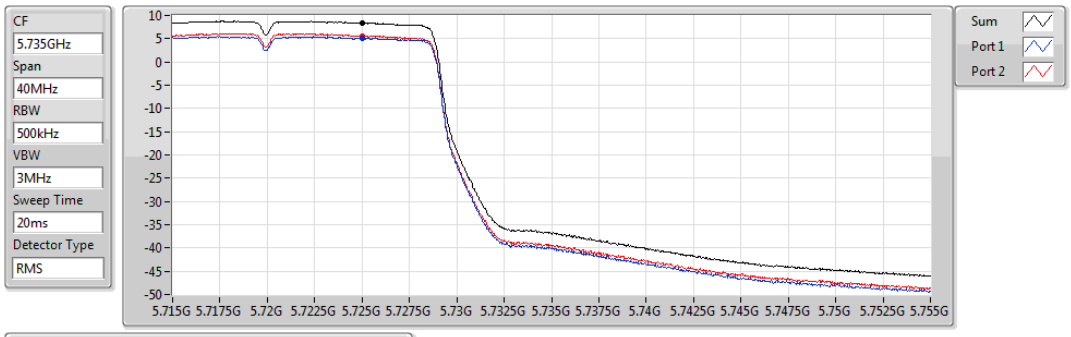


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.29	10.29	6.97	7.66

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

5720MHz Straddle 5.725-5.85GHz

17/06/2019

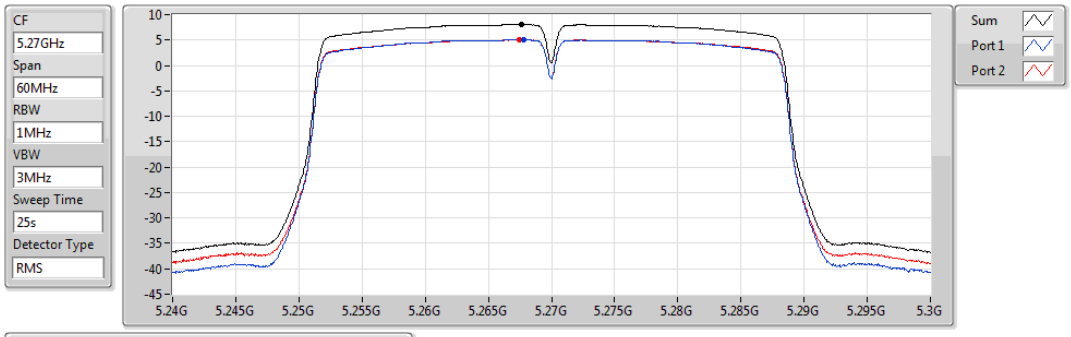


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.41	8.41	5.17	5.65

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

5270MHz

30/05/2019

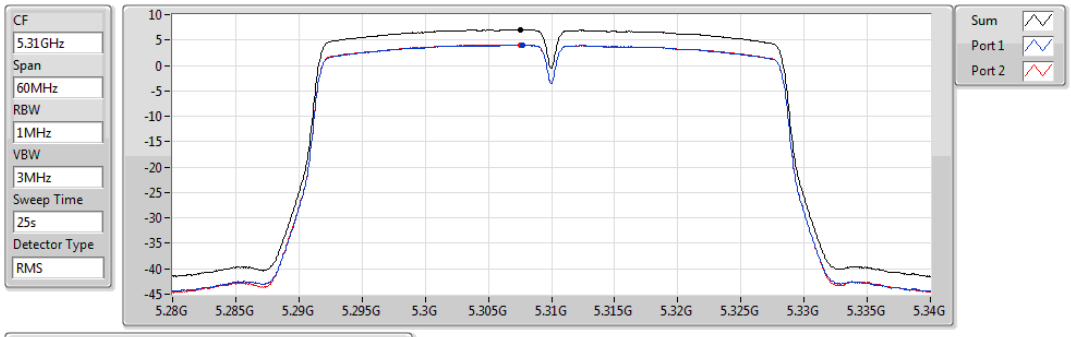


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.07	8.07	5.06	5.07

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

5310MHz

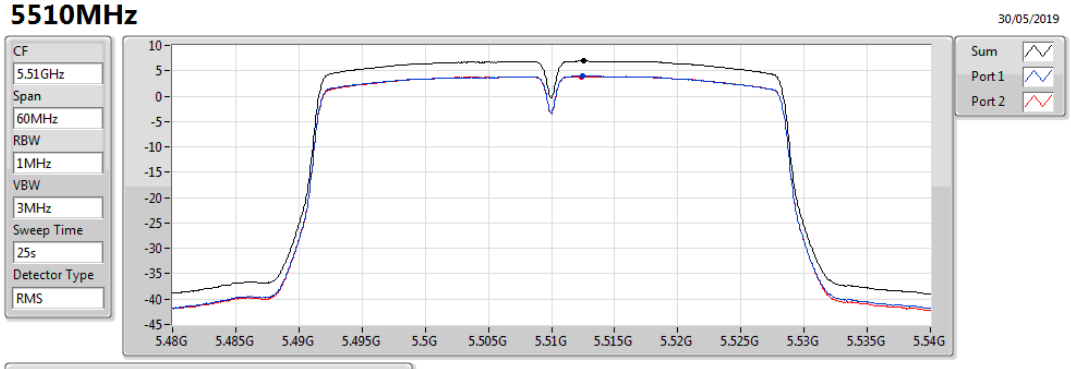
30/05/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.04	7.04	4.00	4.05

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

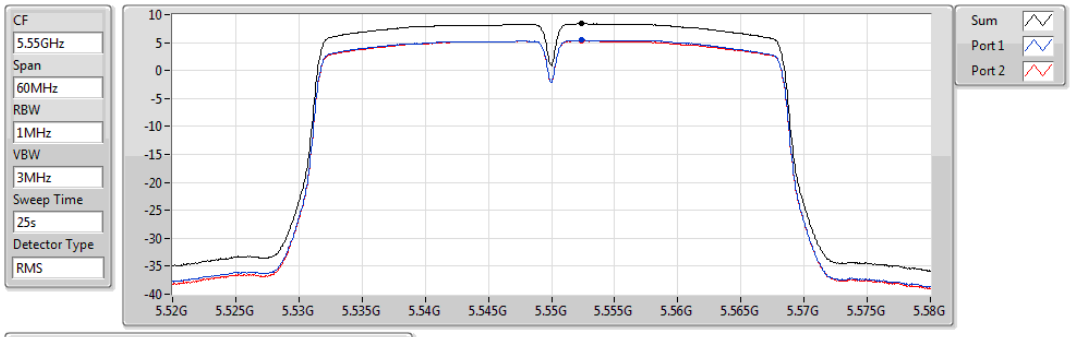
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.94	6.94	4.00	3.87

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

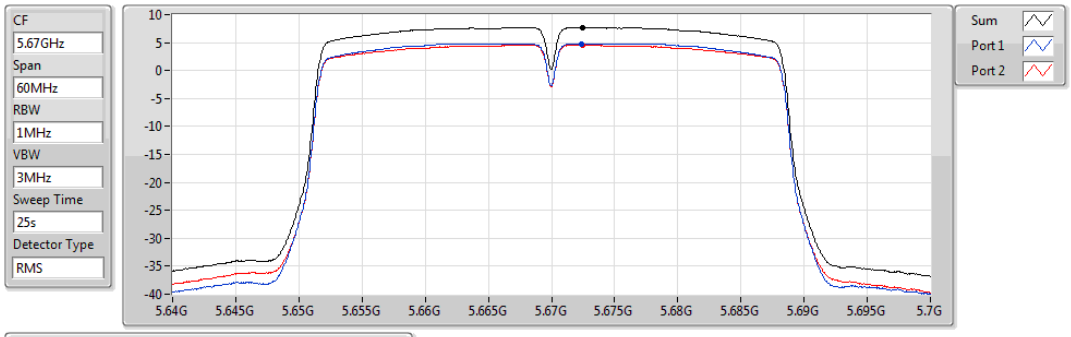
5550MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.39	8.39	5.44	5.32

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

5670MHz

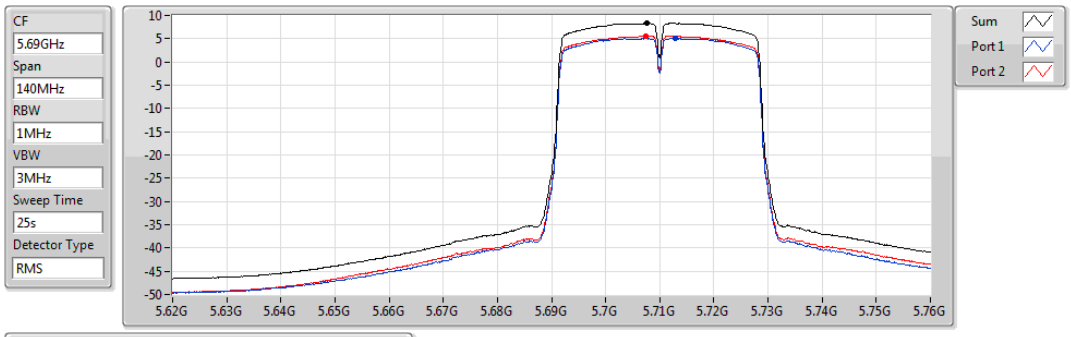


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.72	7.72	4.82	4.61

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

5710MHz Straddle 5.47-5.725GHz

17/06/2019

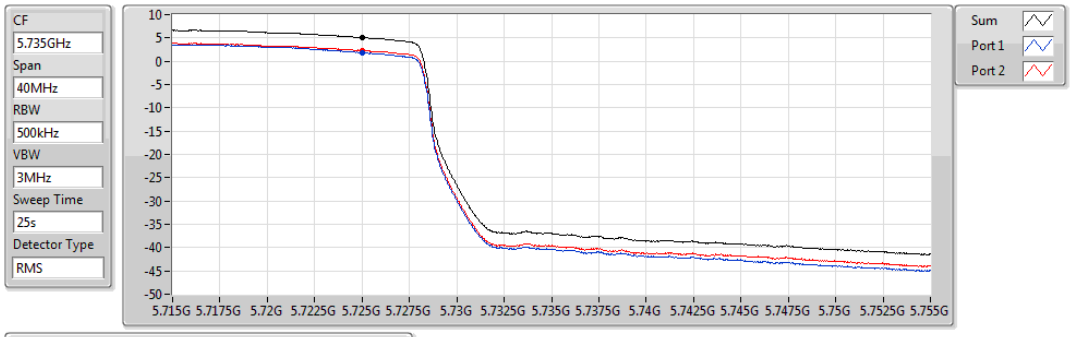


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.33	8.33	5.07	5.59

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

5710MHz Straddle 5.725-5.85GHz

17/06/2019

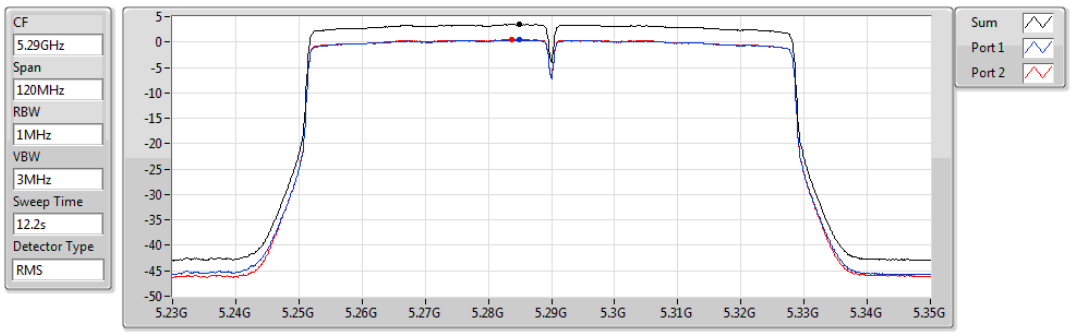


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.09	5.09	1.84	2.32

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

5290MHz

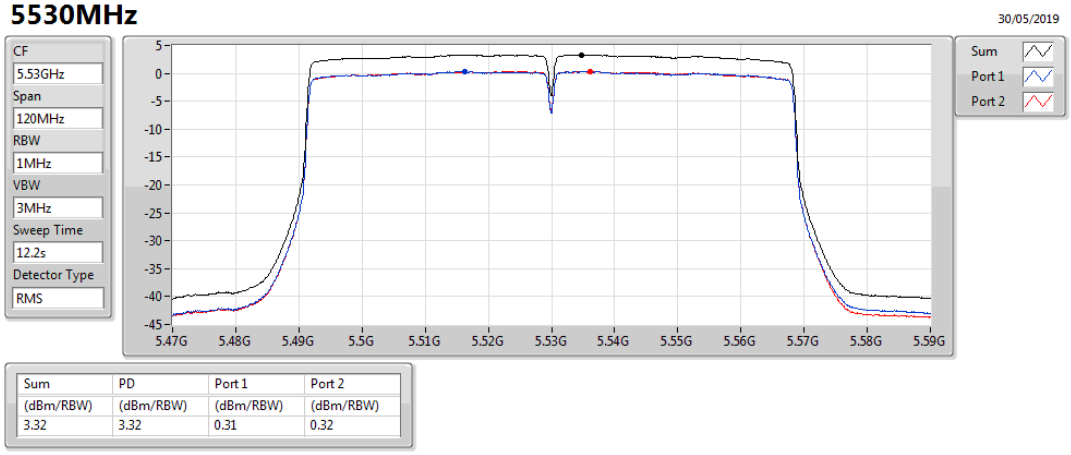
30/05/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.49	3.49	0.43	0.54

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

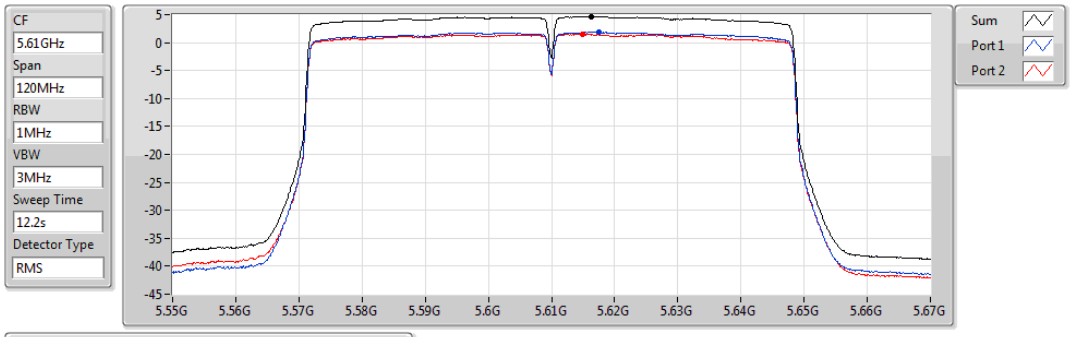
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.32	3.32	0.31	0.32

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

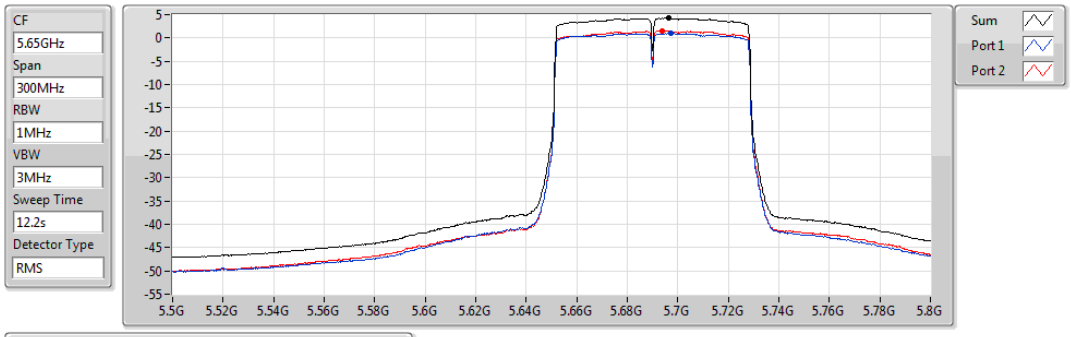
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.67	4.67	1.90	1.48

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

5690MHz Straddle 5.47-5.725GHz

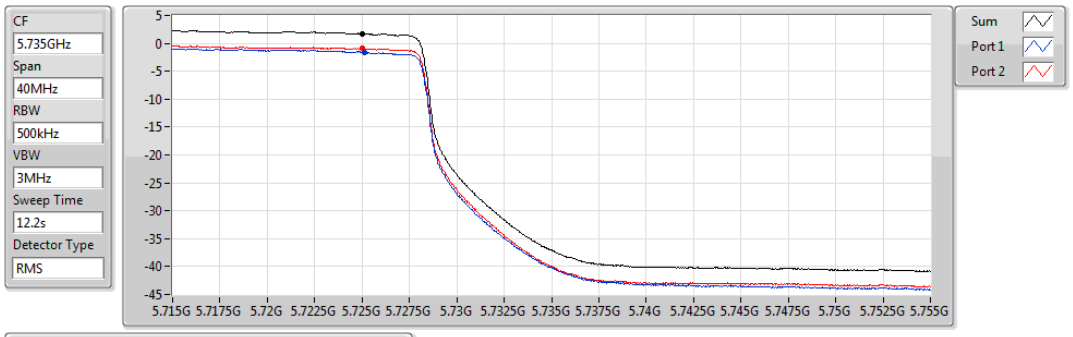


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.26	4.26	1.01	1.50

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

5690MHz Straddle 5.725-5.85GHz

17/06/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.76	1.76	-1.58	-0.93

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.3512G	53.11	54.00	-0.89	4.59	3	Horizontal	79	1.63	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	5.3502G	53.06	54.00	-0.94	4.59	3	Vertical	333	2.01	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.354G	52.77	54.00	-1.23	4.59	3	Horizontal	76	2.05	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.355G	51.64	54.00	-2.36	4.59	3	Horizontal	88	1.69	-
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	PK	5.4698G	67.40	68.20	-0.80	8.67	3	Horizontal	283	1.03	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	PK	5.465G	67.28	68.20	-0.92	8.69	3	Horizontal	284	1.01	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	5.7282G	67.38	68.20	-0.82	5.28	3	Vertical	314	1.68	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.452G	53.21	54.00	-0.79	4.78	3	Horizontal	81	1.50	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	AV	5.1226G	43.31	54.00	-10.69	4.14	3	Vertical	329	1.95	-
5260MHz	Pass	AV	5.2624G	105.79	Inf	-Inf	4.42	3	Vertical	329	1.95	-
5260MHz	Pass	AV	5.3542G	44.20	54.00	-9.80	4.59	3	Vertical	329	1.95	-
5260MHz	Pass	PK	5.1202G	55.08	74.00	-18.92	4.14	3	Vertical	329	1.95	-
5260MHz	Pass	PK	5.257G	116.09	Inf	-Inf	4.40	3	Vertical	329	1.95	-
5260MHz	Pass	PK	5.3932G	56.01	74.00	-17.99	4.67	3	Vertical	329	1.95	-
5260MHz	Pass	AV	5.15G	43.39	54.00	-10.61	4.20	3	Horizontal	82	1.53	-
5260MHz	Pass	AV	5.2612G	107.74	Inf	-Inf	4.42	3	Horizontal	82	1.53	-
5260MHz	Pass	AV	5.35G	44.12	54.00	-9.88	4.59	3	Horizontal	82	1.53	-
5260MHz	Pass	PK	5.1496G	55.41	74.00	-18.59	4.20	3	Horizontal	82	1.53	-
5260MHz	Pass	PK	5.2558G	118.35	Inf	-Inf	4.40	3	Horizontal	82	1.53	-
5260MHz	Pass	PK	5.3566G	56.64	74.00	-17.36	4.60	3	Horizontal	82	1.53	-
5260MHz	Pass	PK	10.51868G	53.36	68.20	-14.84	15.22	3	Vertical	244	1.40	-
5260MHz	Pass	PK	10.514G	53.36	68.20	-14.84	15.21	3	Horizontal	21	2.48	-
5300MHz	Pass	AV	5.2972G	106.00	Inf	-Inf	4.48	3	Vertical	342	1.96	-
5300MHz	Pass	AV	5.35G	48.26	54.00	-5.74	4.59	3	Vertical	342	1.96	-
5300MHz	Pass	PK	5.2976G	116.24	Inf	-Inf	4.48	3	Vertical	342	1.96	-
5300MHz	Pass	PK	5.3532G	64.96	74.00	-9.04	4.59	3	Vertical	342	1.96	-
5300MHz	Pass	AV	5.2964G	107.89	Inf	-Inf	4.48	3	Horizontal	78	1.71	-
5300MHz	Pass	AV	5.3512G	50.81	54.00	-3.19	4.59	3	Horizontal	78	1.71	-
5300MHz	Pass	PK	5.2956G	118.38	Inf	-Inf	4.48	3	Horizontal	78	1.71	-
5300MHz	Pass	PK	5.3504G	66.73	74.00	-7.27	4.59	3	Horizontal	78	1.71	-
5300MHz	Pass	AV	10.60648G	40.57	54.00	-13.43	15.42	3	Vertical	120	1.95	-
5300MHz	Pass	PK	10.59004G	54.01	68.20	-14.19	15.39	3	Vertical	120	1.95	-
5300MHz	Pass	AV	10.61338G	40.64	54.00	-13.36	15.44	3	Horizontal	51	1.74	-
5300MHz	Pass	PK	10.5979G	54.01	68.20	-14.19	15.41	3	Horizontal	51	1.74	-
5320MHz	Pass	AV	5.3228G	103.70	Inf	-Inf	4.52	3	Vertical	331	2.13	-
5320MHz	Pass	AV	5.3532G	50.18	54.00	-3.82	4.59	3	Vertical	331	2.13	-
5320MHz	Pass	PK	5.3228G	113.95	Inf	-Inf	4.52	3	Vertical	331	2.13	-
5320MHz	Pass	PK	5.352G	67.91	74.00	-6.09	4.59	3	Vertical	331	2.13	-
5320MHz	Pass	AV	5.3258G	105.35	Inf	-Inf	4.54	3	Horizontal	79	1.63	-
5320MHz	Pass	AV	5.3512G	53.11	54.00	-0.89	4.59	3	Horizontal	79	1.63	-
5320MHz	Pass	PK	5.3262G	115.67	Inf	-Inf	4.54	3	Horizontal	79	1.63	-
5320MHz	Pass	PK	5.3504G	72.84	74.00	-1.16	4.59	3	Horizontal	79	1.63	-
5320MHz	Pass	AV	10.64384G	40.83	54.00	-13.17	15.51	3	Vertical	244	1.13	-
5320MHz	Pass	PK	10.62782G	53.89	74.00	-20.11	15.48	3	Vertical	244	1.13	-
5320MHz	Pass	AV	10.63322G	40.91	54.00	-13.09	15.50	3	Horizontal	125	2.32	-
5320MHz	Pass	PK	10.64138G	54.46	74.00	-19.54	15.51	3	Horizontal	125	2.32	-
5500MHz	Pass	AV	5.4586G	46.78	54.00	-7.22	8.73	3	Vertical	16	1.01	-
5500MHz	Pass	AV	5.5028G	102.61	Inf	-Inf	8.55	3	Vertical	16	1.01	-
5500MHz	Pass	PK	5.4686G	64.12	68.20	-4.08	8.68	3	Vertical	16	1.01	-
5500MHz	Pass	PK	5.4976G	113.28	Inf	-Inf	8.54	3	Vertical	16	1.01	-
5500MHz	Pass	AV	5.46G	47.43	54.00	-6.57	8.72	3	Horizontal	283	1.03	-
5500MHz	Pass	AV	5.5058G	105.55	Inf	-Inf	8.57	3	Horizontal	283	1.03	-
5500MHz	Pass	PK	5.4698G	67.40	68.20	-0.80	8.67	3	Horizontal	283	1.03	-
5500MHz	Pass	PK	5.5012G	115.42	Inf	-Inf	8.54	3	Horizontal	283	1.03	-
5500MHz	Pass	AV	11.0024G	44.49	54.00	-9.51	19.09	3	Vertical	148	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5500MHz	Pass	PK	10.99932G	57.11	74.00	-16.89	19.09	3	Vertical	148	1.50	-
5500MHz	Pass	AV	11.00063G	44.36	54.00	-9.64	19.09	3	Horizontal	109	2.39	-
5500MHz	Pass	PK	11.00056G	57.00	74.00	-17.00	19.09	3	Horizontal	109	2.39	-
5580MHz	Pass	AV	5.4486G	45.87	54.00	-8.13	8.77	3	Vertical	19	1.01	-
5580MHz	Pass	AV	5.5782G	106.68	Inf	-Inf	9.15	3	Vertical	19	1.01	-
5580MHz	Pass	PK	5.469G	58.02	68.20	-10.18	8.68	3	Vertical	19	1.01	-
5580MHz	Pass	PK	5.5782G	116.12	Inf	-Inf	9.15	3	Vertical	19	1.01	-
5580MHz	Pass	PK	5.7264G	59.05	68.20	-9.15	9.56	3	Vertical	19	1.01	-
5580MHz	Pass	AV	5.4402G	46.19	54.00	-7.81	8.81	3	Horizontal	286	1.01	-
5580MHz	Pass	AV	5.5758G	110.11	Inf	-Inf	9.14	3	Horizontal	286	1.01	-
5580MHz	Pass	PK	5.4684G	58.58	68.20	-9.62	8.68	3	Horizontal	286	1.01	-
5580MHz	Pass	PK	5.5764G	120.88	Inf	-Inf	9.14	3	Horizontal	286	1.01	-
5580MHz	Pass	PK	5.7258G	59.11	68.20	-9.09	9.56	3	Horizontal	286	1.01	-
5580MHz	Pass	AV	11.16071G	44.31	54.00	-9.69	18.96	3	Vertical	323	1.50	-
5580MHz	Pass	PK	11.16164G	57.30	74.00	-16.70	18.95	3	Vertical	323	1.50	-
5580MHz	Pass	AV	11.15887G	44.27	54.00	-9.73	18.96	3	Horizontal	360	1.03	-
5580MHz	Pass	PK	11.16123G	57.09	74.00	-16.91	18.95	3	Horizontal	360	1.03	-
5700MHz	Pass	AV	5.6992G	102.61	Inf	-Inf	9.51	3	Vertical	55	1.01	-
5700MHz	Pass	PK	5.704G	112.46	Inf	-Inf	9.53	3	Vertical	55	1.01	-
5700MHz	Pass	PK	5.7252G	66.34	68.20	-1.86	9.56	3	Vertical	55	1.01	-
5700MHz	Pass	AV	5.7052G	105.25	Inf	-Inf	9.53	3	Horizontal	283	1.01	-
5700MHz	Pass	PK	5.6956G	114.88	Inf	-Inf	9.50	3	Horizontal	283	1.01	-
5700MHz	Pass	PK	5.7264G	67.24	68.20	-0.96	9.56	3	Horizontal	283	1.01	-
5700MHz	Pass	AV	11.40029G	43.87	54.00	-10.13	18.77	3	Vertical	0	1.50	-
5700MHz	Pass	PK	11.40221G	56.86	74.00	-17.14	18.77	3	Vertical	0	1.50	-
5700MHz	Pass	AV	11.40016G	43.96	54.00	-10.04	18.77	3	Horizontal	85	1.55	-
5700MHz	Pass	PK	11.39975G	56.27	74.00	-17.73	18.77	3	Horizontal	85	1.55	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.4236G	45.41	54.00	-8.59	9.03	3	Vertical	360	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.7212G	111.89	Inf	-Inf	9.53	3	Vertical	360	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.46G	55.63	68.20	-12.57	9.23	3	Vertical	360	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.7224G	121.09	Inf	-Inf	9.53	3	Vertical	360	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.8664G	58.48	68.20	-9.72	9.92	3	Vertical	360	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.4392G	45.35	54.00	-8.65	9.12	3	Horizontal	80	2.11	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.7152G	113.85	Inf	-Inf	9.51	3	Horizontal	80	2.11	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.4692G	55.72	68.20	-12.48	9.28	3	Horizontal	80	2.11	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.7212G	122.31	Inf	-Inf	9.53	3	Horizontal	80	2.11	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.9216G	58.36	68.20	-9.84	10.05	3	Horizontal	80	2.11	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	11.43598G	44.50	54.00	-9.50	17.95	3	Vertical	350	1.50	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	11.42572G	59.92	74.00	-14.08	17.95	3	Vertical	350	1.50	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	11.43988G	44.60	54.00	-5.43	21.91	3	Horizontal	353	1.44	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	11.44282G	60.48	74.00	-13.52	21.91	3	Horizontal	353	1.44	-
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	AV	5.1358G	46.00	54.00	-8.00	8.60	3	Vertical	31	1.00	-
5260MHz	Pass	AV	5.2678G	103.84	Inf	-Inf	8.80	3	Vertical	31	1.00	-
5260MHz	Pass	AV	5.3512G	45.10	54.00	-8.90	8.92	3	Vertical	31	1.00	-
5260MHz	Pass	PK	5.137G	59.37	74.00	-14.63	8.60	3	Vertical	31	1.00	-
5260MHz	Pass	PK	5.266G	115.63	Inf	-Inf	8.80	3	Vertical	31	1.00	-
5260MHz	Pass	PK	5.3566G	58.48	74.00	-15.52	8.92	3	Vertical	31	1.00	-
5260MHz	Pass	AV	5.1358G	46.03	54.00	-7.97	8.60	3	Horizontal	283	1.01	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5260MHz	Pass	AV	5.263G	106.96	Inf	-Inf	8.79	3	Horizontal	283	1.01	-
5260MHz	Pass	AV	5.35G	45.33	54.00	-8.67	8.92	3	Horizontal	283	1.01	-
5260MHz	Pass	PK	5.1448G	59.17	74.00	-14.83	8.62	3	Horizontal	283	1.01	-
5260MHz	Pass	PK	5.263G	118.08	Inf	-Inf	8.79	3	Horizontal	283	1.01	-
5260MHz	Pass	PK	5.3938G	58.54	74.00	-15.46	8.99	3	Horizontal	283	1.01	-
5260MHz	Pass	PK	10.5287G	53.58	68.20	-14.62	15.24	3	Vertical	348	1.55	-
5260MHz	Pass	PK	10.51472G	53.11	68.20	-15.09	15.21	3	Horizontal	67	1.10	-
5300MHz	Pass	AV	5.2928G	103.52	Inf	-Inf	8.84	3	Vertical	35	1.01	-
5300MHz	Pass	AV	5.35G	49.89	54.00	-4.11	8.92	3	Vertical	35	1.01	-
5300MHz	Pass	PK	5.2924G	114.94	Inf	-Inf	8.84	3	Vertical	35	1.01	-
5300MHz	Pass	PK	5.3508G	67.84	74.00	-6.16	8.92	3	Vertical	35	1.01	-
5300MHz	Pass	AV	5.3036G	107.27	Inf	-Inf	8.84	3	Horizontal	285	1.01	-
5300MHz	Pass	AV	5.35G	51.12	54.00	-2.88	8.92	3	Horizontal	285	1.01	-
5300MHz	Pass	PK	5.3028G	118.30	Inf	-Inf	8.84	3	Horizontal	285	1.01	-
5300MHz	Pass	PK	5.3648G	66.59	74.00	-7.41	8.94	3	Horizontal	285	1.01	-
5300MHz	Pass	AV	10.61098G	39.81	54.00	-14.19	15.44	3	Vertical	312	2.19	-
5300MHz	Pass	PK	10.61308G	53.67	74.00	-20.33	15.44	3	Vertical	312	2.19	-
5300MHz	Pass	AV	10.61104G	39.79	54.00	-14.21	15.44	3	Horizontal	353	1.83	-
5300MHz	Pass	PK	10.61146G	53.91	74.00	-20.09	15.44	3	Horizontal	353	1.83	-
5320MHz	Pass	AV	5.3126G	103.14	Inf	-Inf	4.51	3	Vertical	333	2.01	-
5320MHz	Pass	AV	5.3502G	53.06	54.00	-0.94	4.59	3	Vertical	333	2.01	-
5320MHz	Pass	PK	5.3124G	113.97	Inf	-Inf	4.51	3	Vertical	333	2.01	-
5320MHz	Pass	PK	5.3502G	70.57	74.00	-3.43	4.59	3	Vertical	333	2.01	-
5320MHz	Pass	AV	5.3236G	104.58	Inf	-Inf	4.52	3	Horizontal	85	1.64	-
5320MHz	Pass	AV	5.35G	51.94	54.00	-2.06	4.59	3	Horizontal	85	1.64	-
5320MHz	Pass	PK	5.3252G	115.71	Inf	-Inf	4.54	3	Horizontal	85	1.64	-
5320MHz	Pass	PK	5.35G	68.17	74.00	-5.83	4.59	3	Horizontal	85	1.64	-
5320MHz	Pass	AV	10.65404G	40.01	54.00	-13.99	15.54	3	Vertical	286	1.60	-
5320MHz	Pass	PK	10.63616G	54.24	74.00	-19.76	15.50	3	Vertical	286	1.60	-
5320MHz	Pass	AV	10.65398G	40.00	54.00	-14.00	15.54	3	Horizontal	95	1.62	-
5320MHz	Pass	PK	10.63838G	54.19	74.00	-19.81	15.50	3	Horizontal	95	1.62	-
5500MHz	Pass	AV	5.46G	45.97	54.00	-8.03	8.72	3	Vertical	29	1.03	-
5500MHz	Pass	AV	5.4946G	100.03	Inf	-Inf	8.56	3	Vertical	29	1.03	-
5500MHz	Pass	PK	5.4698G	66.50	68.20	-1.70	8.67	3	Vertical	29	1.03	-
5500MHz	Pass	PK	5.497G	112.20	Inf	-Inf	8.55	3	Vertical	29	1.03	-
5500MHz	Pass	AV	5.46G	47.43	54.00	-6.57	8.72	3	Horizontal	284	1.01	-
5500MHz	Pass	AV	5.5026G	103.67	Inf	-Inf	8.55	3	Horizontal	284	1.01	-
5500MHz	Pass	PK	5.465G	67.28	68.20	-0.92	8.69	3	Horizontal	284	1.01	-
5500MHz	Pass	PK	5.5034G	116.00	Inf	-Inf	8.55	3	Horizontal	284	1.01	-
5500MHz	Pass	AV	10.99154G	39.92	54.00	-14.08	16.35	3	Vertical	138	2.20	-
5500MHz	Pass	PK	10.99544G	53.73	74.00	-20.27	16.36	3	Vertical	138	2.20	-
5500MHz	Pass	AV	10.99418G	39.92	54.00	-14.08	16.36	3	Horizontal	317	1.29	-
5500MHz	Pass	PK	11.00714G	54.52	74.00	-19.48	16.37	3	Horizontal	317	1.29	-
5580MHz	Pass	AV	5.448G	45.13	54.00	-8.87	8.77	3	Vertical	25	1.01	-
5580MHz	Pass	AV	5.5758G	104.43	Inf	-Inf	9.14	3	Vertical	25	1.01	-
5580MHz	Pass	PK	5.4648G	57.90	68.20	-10.30	8.69	3	Vertical	25	1.01	-
5580MHz	Pass	PK	5.574G	115.83	Inf	-Inf	9.12	3	Vertical	25	1.01	-
5580MHz	Pass	PK	5.7264G	58.79	68.20	-9.41	9.56	3	Vertical	25	1.01	-
5580MHz	Pass	AV	5.4402G	45.50	54.00	-8.50	8.81	3	Horizontal	278	1.02	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5580MHz	Pass	AV	5.583G	108.32	Inf	-Inf	9.19	3	Horizontal	278	1.02	-
5580MHz	Pass	PK	5.4612G	57.74	68.20	-10.46	8.71	3	Horizontal	278	1.02	-
5580MHz	Pass	PK	5.5836G	120.09	Inf	-Inf	9.19	3	Horizontal	278	1.02	-
5580MHz	Pass	PK	5.7264G	58.72	68.20	-9.48	9.56	3	Horizontal	278	1.02	-
5580MHz	Pass	AV	11.1513G	40.41	54.00	-13.59	16.20	3	Vertical	343	1.18	-
5580MHz	Pass	PK	11.16948G	54.17	74.00	-19.83	16.17	3	Vertical	343	1.18	-
5580MHz	Pass	AV	11.14908G	40.42	54.00	-13.58	16.20	3	Horizontal	15	2.41	-
5580MHz	Pass	PK	11.14962G	54.58	74.00	-19.42	16.20	3	Horizontal	15	2.41	-
5700MHz	Pass	AV	5.7056G	99.51	Inf	-Inf	9.95	3	Vertical	1	1.50	-
5700MHz	Pass	PK	5.7024G	110.74	Inf	-Inf	9.94	3	Vertical	1	1.50	-
5700MHz	Pass	PK	5.7256G	65.15	68.20	-3.05	9.98	3	Vertical	1	1.50	-
5700MHz	Pass	AV	5.7028G	105.62	Inf	-Inf	9.94	3	Horizontal	283	1.01	-
5700MHz	Pass	PK	5.7028G	115.33	Inf	-Inf	9.94	3	Horizontal	283	1.01	-
5700MHz	Pass	PK	5.7252G	67.06	68.20	-1.14	9.98	3	Horizontal	283	1.01	-
5700MHz	Pass	AV	11.41032G	39.50	54.00	-14.50	15.89	3	Vertical	23	1.34	-
5700MHz	Pass	PK	11.40246G	53.43	74.00	-20.57	15.90	3	Vertical	23	1.34	-
5700MHz	Pass	AV	11.41302G	39.50	54.00	-14.50	15.88	3	Horizontal	346	1.44	-
5700MHz	Pass	PK	11.40354G	53.23	74.00	-20.77	15.90	3	Horizontal	346	1.44	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.4236G	44.78	54.00	-9.22	9.03	3	Vertical	0	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.7248G	110.88	Inf	-Inf	9.54	3	Vertical	0	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.462G	55.94	68.20	-12.26	9.24	3	Vertical	0	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.726G	121.30	Inf	-Inf	9.55	3	Vertical	0	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.9084G	58.35	68.20	-9.85	10.03	3	Vertical	0	1.46	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.4392G	44.85	54.00	-9.15	9.12	3	Horizontal	76	1.93	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	5.7224G	113.28	Inf	-Inf	9.53	3	Horizontal	76	1.93	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.468G	55.41	68.20	-12.79	9.27	3	Horizontal	76	1.93	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.7212G	122.02	Inf	-Inf	9.53	3	Horizontal	76	1.93	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	5.9024G	58.11	68.20	-10.09	10.02	3	Horizontal	76	1.93	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	11.43652G	43.96	54.00	-10.04	17.95	3	Vertical	14	1.27	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	11.43826G	59.64	74.00	-14.36	17.94	3	Vertical	14	1.27	-
5720MHz Straddle 5.47-5.725GHz	Pass	AV	11.43952G	43.93	54.00	-10.07	17.94	3	Horizontal	349	1.27	-
5720MHz Straddle 5.47-5.725GHz	Pass	PK	11.44012G	60.31	74.00	-13.69	17.94	3	Horizontal	349	1.27	-
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	AV	5.2784G	102.62	Inf	-Inf	4.45	3	Vertical	350	1.50	-
5270MHz	Pass	AV	5.3596G	50.26	54.00	-3.74	4.61	3	Vertical	350	1.50	-
5270MHz	Pass	PK	5.2784G	112.58	Inf	-Inf	4.45	3	Vertical	350	1.50	-
5270MHz	Pass	PK	5.3516G	65.53	74.00	-8.47	4.59	3	Vertical	350	1.50	-
5270MHz	Pass	AV	5.2752G	103.95	Inf	-Inf	4.44	3	Horizontal	76	2.05	-
5270MHz	Pass	AV	5.354G	52.77	54.00	-1.23	4.59	3	Horizontal	76	2.05	-
5270MHz	Pass	PK	5.2752G	113.80	Inf	-Inf	4.44	3	Horizontal	76	2.05	-
5270MHz	Pass	PK	5.3516G	68.08	74.00	-5.92	4.59	3	Horizontal	76	2.05	-
5270MHz	Pass	PK	10.54834G	53.48	68.20	-14.72	15.29	3	Vertical	5	1.15	-
5270MHz	Pass	PK	10.52908G	53.25	68.20	-14.95	15.24	3	Horizontal	278	2.14	-
5310MHz	Pass	AV	5.3184G	98.67	Inf	-Inf	4.52	3	Vertical	344	1.62	-
5310MHz	Pass	AV	5.3612G	48.32	54.00	-5.68	4.61	3	Vertical	344	1.62	-
5310MHz	Pass	PK	5.3192G	108.52	Inf	-Inf	4.52	3	Vertical	344	1.62	-
5310MHz	Pass	PK	5.3548G	65.20	74.00	-8.80	4.59	3	Vertical	344	1.62	-
5310MHz	Pass	AV	5.314G	100.60	Inf	-Inf	4.51	3	Horizontal	84	1.70	-
5310MHz	Pass	AV	5.3528G	51.35	54.00	-2.65	4.59	3	Horizontal	84	1.70	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5310MHz	Pass	PK	5.3124G	110.58	Inf	-Inf	4.51	3	Horizontal	84	1.70	-
5310MHz	Pass	PK	5.3516G	69.74	74.00	-4.26	4.59	3	Horizontal	84	1.70	-
5310MHz	Pass	AV	10.62726G	40.77	54.00	-13.23	15.48	3	Vertical	45	1.94	-
5310MHz	Pass	PK	10.6329G	54.07	74.00	-19.93	15.50	3	Vertical	45	1.94	-
5310MHz	Pass	AV	10.62582G	40.85	54.00	-13.15	15.48	3	Horizontal	51	1.65	-
5310MHz	Pass	PK	10.6191G	54.34	74.00	-19.66	15.45	3	Horizontal	51	1.65	-
5510MHz	Pass	AV	5.46G	48.71	54.00	-5.29	4.80	3	Vertical	331	1.34	-
5510MHz	Pass	AV	5.504G	99.57	Inf	-Inf	4.88	3	Vertical	331	1.34	-
5510MHz	Pass	PK	5.4628G	66.87	68.20	-1.33	4.80	3	Vertical	331	1.34	-
5510MHz	Pass	PK	5.5052G	109.48	Inf	-Inf	4.88	3	Vertical	331	1.34	-
5510MHz	Pass	AV	5.4548G	48.79	54.00	-5.21	4.78	3	Horizontal	83	1.52	-
5510MHz	Pass	AV	5.5132G	101.40	Inf	-Inf	4.89	3	Horizontal	83	1.52	-
5510MHz	Pass	PK	5.4696G	67.18	68.20	-1.02	4.81	3	Horizontal	83	1.52	-
5510MHz	Pass	PK	5.5136G	111.60	Inf	-Inf	4.89	3	Horizontal	83	1.52	-
5510MHz	Pass	AV	11.03218G	40.81	54.00	-13.19	16.33	3	Vertical	12	2.45	-
5510MHz	Pass	PK	11.01352G	53.96	74.00	-20.04	16.36	3	Vertical	12	2.45	-
5510MHz	Pass	AV	11.00674G	40.66	54.00	-13.34	16.37	3	Horizontal	147	2.30	-
5510MHz	Pass	PK	11.0317G	53.69	74.00	-20.31	16.34	3	Horizontal	147	2.30	-
5550MHz	Pass	AV	5.4596G	48.06	54.00	-5.94	4.80	3	Vertical	332	1.49	-
5550MHz	Pass	AV	5.544G	104.29	Inf	-Inf	4.94	3	Vertical	332	1.49	-
5550MHz	Pass	PK	5.4688G	65.96	68.20	-2.24	4.81	3	Vertical	332	1.49	-
5550MHz	Pass	PK	5.5456G	114.86	Inf	-Inf	4.95	3	Vertical	332	1.49	-
5550MHz	Pass	AV	5.454G	48.21	54.00	-5.79	4.78	3	Horizontal	86	2.03	-
5550MHz	Pass	AV	5.554G	105.90	Inf	-Inf	4.97	3	Horizontal	86	2.03	-
5550MHz	Pass	PK	5.4696G	67.26	68.20	-0.94	4.81	3	Horizontal	86	2.03	-
5550MHz	Pass	PK	5.552G	115.66	Inf	-Inf	4.96	3	Horizontal	86	2.03	-
5550MHz	Pass	AV	11.10678G	41.12	54.00	-12.88	16.25	3	Vertical	215	1.87	-
5550MHz	Pass	PK	11.0982G	54.00	74.00	-20.00	16.25	3	Vertical	215	1.87	-
5550MHz	Pass	AV	11.09052G	41.02	54.00	-12.98	16.27	3	Horizontal	356	2.10	-
5550MHz	Pass	PK	11.11164G	54.48	74.00	-19.52	16.24	3	Horizontal	356	2.10	-
5670MHz	Pass	AV	5.6724G	101.64	Inf	-Inf	5.19	3	Vertical	314	1.68	-
5670MHz	Pass	PK	5.673G	111.41	Inf	-Inf	5.19	3	Vertical	314	1.68	-
5670MHz	Pass	PK	5.7282G	67.38	68.20	-0.82	5.28	3	Vertical	314	1.68	-
5670MHz	Pass	AV	5.676G	103.46	Inf	-Inf	5.19	3	Horizontal	80	2.07	-
5670MHz	Pass	PK	5.6742G	113.93	Inf	-Inf	5.19	3	Horizontal	80	2.07	-
5670MHz	Pass	PK	5.727G	67.16	68.20	-1.04	5.28	3	Horizontal	80	2.07	-
5670MHz	Pass	AV	11.3262G	40.53	54.00	-13.47	15.98	3	Vertical	294	2.38	-
5670MHz	Pass	PK	11.32608G	53.49	74.00	-20.51	15.98	3	Vertical	294	2.38	-
5670MHz	Pass	AV	11.35386G	40.50	54.00	-13.50	15.95	3	Horizontal	123	2.11	-
5670MHz	Pass	PK	11.32578G	53.80	74.00	-20.20	15.98	3	Horizontal	123	2.11	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	5.4232G	45.29	54.00	-8.71	9.03	3	Vertical	357	1.46	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	5.7172G	108.46	Inf	-Inf	9.52	3	Vertical	357	1.46	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.464G	55.61	68.20	-12.59	9.25	3	Vertical	357	1.46	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.7184G	117.27	Inf	-Inf	9.53	3	Vertical	357	1.46	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.86G	59.37	68.20	-8.83	9.90	3	Vertical	357	1.46	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	5.44G	45.34	54.00	-8.66	9.12	3	Horizontal	76	2.27	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	5.7124G	110.77	Inf	-Inf	9.51	3	Horizontal	76	2.27	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.464G	55.50	68.20	-12.70	9.25	3	Horizontal	76	2.27	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.7124G	119.36	Inf	-Inf	9.51	3	Horizontal	76	2.27	-

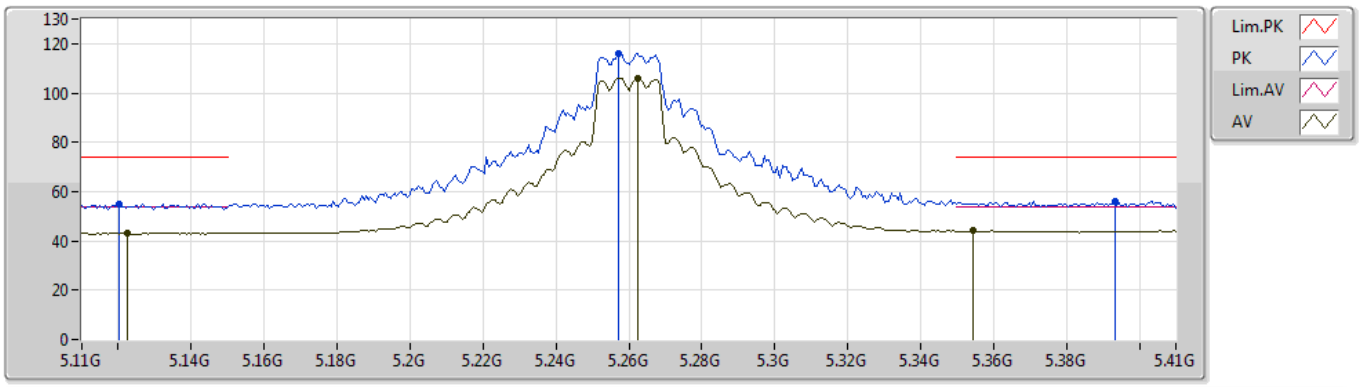
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5710MHz Straddle 5.47-5.725GHz	Pass	PK	5.8528G	60.93	68.20	-7.27	9.89	3	Horizontal	76	2.27	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	11.42726G	44.30	54.00	-9.70	17.95	3	Vertical	279	1.50	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	11.41724G	55.76	74.00	-18.24	17.96	3	Vertical	279	1.50	-
5710MHz Straddle 5.47-5.725GHz	Pass	AV	11.41982G	44.49	54.00	-9.51	17.96	3	Horizontal	4	1.30	-
5710MHz Straddle 5.47-5.725GHz	Pass	PK	11.40638G	56.31	74.00	-17.69	17.97	3	Horizontal	4	1.30	-
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	AV	5.136G	43.94	54.00	-10.06	4.17	3	Vertical	335	1.74	-
5290MHz	Pass	AV	5.297G	95.81	Inf	-Inf	4.48	3	Vertical	335	1.74	-
5290MHz	Pass	AV	5.365G	49.23	54.00	-4.77	4.62	3	Vertical	335	1.74	-
5290MHz	Pass	PK	5.044G	55.55	74.00	-18.45	4.00	3	Vertical	335	1.74	-
5290MHz	Pass	PK	5.298G	105.41	Inf	-Inf	4.48	3	Vertical	335	1.74	-
5290MHz	Pass	PK	5.362G	62.82	74.00	-11.18	4.61	3	Vertical	335	1.74	-
5290MHz	Pass	AV	5.15G	44.81	54.00	-9.19	4.20	3	Horizontal	88	1.69	-
5290MHz	Pass	AV	5.314G	96.60	Inf	-Inf	4.51	3	Horizontal	88	1.69	-
5290MHz	Pass	AV	5.355G	51.64	54.00	-2.36	4.59	3	Horizontal	88	1.69	-
5290MHz	Pass	PK	5.149G	56.73	74.00	-17.27	4.20	3	Horizontal	88	1.69	-
5290MHz	Pass	PK	5.293G	106.06	Inf	-Inf	4.48	3	Horizontal	88	1.69	-
5290MHz	Pass	PK	5.358G	66.68	74.00	-7.32	4.60	3	Horizontal	88	1.69	-
5290MHz	Pass	PK	10.57382G	53.95	68.20	-14.25	15.35	3	Vertical	274	1.21	-
5290MHz	Pass	PK	10.57418G	53.50	68.20	-14.70	15.35	3	Horizontal	168	2.05	-
5530MHz	Pass	AV	5.46G	52.80	54.00	-1.20	4.80	3	Vertical	335	1.49	-
5530MHz	Pass	AV	5.545G	96.33	Inf	-Inf	4.94	3	Vertical	335	1.49	-
5530MHz	Pass	PK	5.461G	66.67	68.20	-1.53	4.80	3	Vertical	335	1.49	-
5530MHz	Pass	PK	5.546G	106.16	Inf	-Inf	4.95	3	Vertical	335	1.49	-
5530MHz	Pass	PK	5.763G	56.87	68.20	-11.33	5.35	3	Vertical	335	1.49	-
5530MHz	Pass	AV	5.452G	53.21	54.00	-0.79	4.78	3	Horizontal	81	1.50	-
5530MHz	Pass	AV	5.535G	97.65	Inf	-Inf	4.93	3	Horizontal	81	1.50	-
5530MHz	Pass	PK	5.466G	65.01	68.20	-3.19	4.80	3	Horizontal	81	1.50	-
5530MHz	Pass	PK	5.514G	107.21	Inf	-Inf	4.90	3	Horizontal	81	1.50	-
5530MHz	Pass	PK	5.78G	57.41	68.20	-10.79	5.38	3	Horizontal	81	1.50	-
5530MHz	Pass	AV	11.05898G	40.83	54.00	-13.17	16.30	3	Vertical	97	1.22	-
5530MHz	Pass	PK	11.07122G	54.05	74.00	-19.95	16.29	3	Vertical	97	1.22	-
5530MHz	Pass	AV	11.0513G	41.05	54.00	-12.95	16.32	3	Horizontal	68	1.78	-
5530MHz	Pass	PK	11.0549G	53.64	74.00	-20.36	16.31	3	Horizontal	68	1.78	-
5610MHz	Pass	AV	5.46G	45.02	54.00	-8.98	4.80	3	Vertical	320	1.49	-
5610MHz	Pass	AV	5.609G	97.78	Inf	-Inf	5.07	3	Vertical	320	1.49	-
5610MHz	Pass	PK	5.463G	58.64	68.20	-9.56	4.80	3	Vertical	320	1.49	-
5610MHz	Pass	PK	5.626G	107.67	Inf	-Inf	5.10	3	Vertical	320	1.49	-
5610MHz	Pass	PK	5.728G	67.35	68.20	-0.85	5.28	3	Vertical	320	1.49	-
5610MHz	Pass	AV	5.453G	45.73	54.00	-8.27	4.78	3	Horizontal	87	2.13	-
5610MHz	Pass	AV	5.635G	100.20	Inf	-Inf	5.11	3	Horizontal	87	2.13	-
5610MHz	Pass	PK	5.469G	62.44	68.20	-5.76	4.81	3	Horizontal	87	2.13	-
5610MHz	Pass	PK	5.636G	110.28	Inf	-Inf	5.11	3	Horizontal	87	2.13	-
5610MHz	Pass	PK	5.735G	67.41	68.20	-0.79	5.30	3	Horizontal	87	2.13	-
5610MHz	Pass	AV	11.20764G	40.98	54.00	-13.02	16.12	3	Vertical	160	2.08	-
5610MHz	Pass	PK	11.20836G	54.75	74.00	-19.25	16.12	3	Vertical	160	2.08	-
5610MHz	Pass	AV	11.21256G	40.86	54.00	-13.14	16.12	3	Horizontal	331	2.05	-
5610MHz	Pass	PK	11.20632G	53.40	74.00	-20.60	16.12	3	Horizontal	331	2.05	-
5690MHz Straddle 5.47-5.725GHz	Pass	AV	5.456G	45.47	54.00	-8.53	9.20	3	Vertical	354	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5690MHz Straddle 5.47-5.725GHz	Pass	AV	5.6972G	103.25	Inf	-Inf	9.48	3	Vertical	354	1.50	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.4644G	55.68	68.20	-12.52	9.25	3	Vertical	354	1.50	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.6984G	111.41	Inf	-Inf	9.48	3	Vertical	354	1.50	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.864G	63.13	68.20	-5.07	9.92	3	Vertical	354	1.50	-
5690MHz Straddle 5.47-5.725GHz	Pass	AV	5.4308G	45.73	54.00	-8.27	9.07	3	Horizontal	73	2.03	-
5690MHz Straddle 5.47-5.725GHz	Pass	AV	5.6936G	105.41	Inf	-Inf	9.46	3	Horizontal	73	2.03	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.468G	56.41	68.20	-11.79	9.27	3	Horizontal	73	2.03	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.6924G	114.68	Inf	-Inf	9.46	3	Horizontal	73	2.03	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	5.852G	67.41	68.20	-0.79	9.88	3	Horizontal	73	2.03	-
5690MHz Straddle 5.47-5.725GHz	Pass	AV	11.39422G	44.34	54.00	-9.66	17.98	3	Vertical	351	2.20	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	11.37166G	56.58	74.00	-17.42	17.99	3	Vertical	351	2.20	-
5690MHz Straddle 5.47-5.725GHz	Pass	AV	11.39392G	44.32	54.00	-9.68	17.98	3	Horizontal	295	1.89	-
5690MHz Straddle 5.47-5.725GHz	Pass	PK	11.38654G	55.75	74.00	-18.25	17.99	3	Horizontal	295	1.89	-

802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

29/05/2019

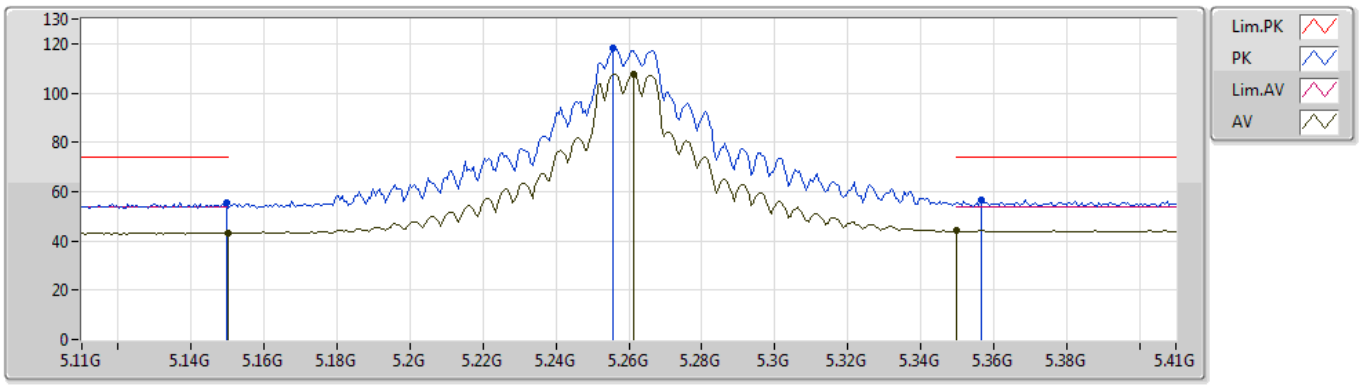


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1226G	43.31	54.00	-10.69	4.14	3	Vertical	329	1.95	-
AV	5.2624G	105.79	Inf	-Inf	4.42	3	Vertical	329	1.95	-
AV	5.3542G	44.20	54.00	-9.80	4.59	3	Vertical	329	1.95	-
PK	5.1202G	55.08	74.00	-18.92	4.14	3	Vertical	329	1.95	-
PK	5.257G	116.09	Inf	-Inf	4.40	3	Vertical	329	1.95	-
PK	5.3932G	56.01	74.00	-17.99	4.67	3	Vertical	329	1.95	-

802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

29/05/2019

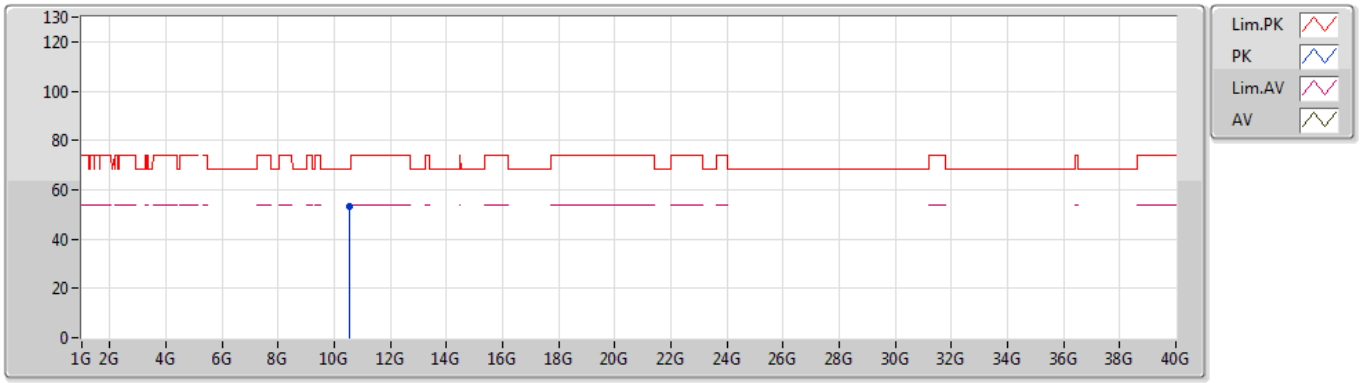


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.15G	43.39	54.00	-10.61	4.20	3	Horizontal	82	1.53	-
AV	5.2612G	107.74	Inf	-Inf	4.42	3	Horizontal	82	1.53	-
AV	5.35G	44.12	54.00	-9.88	4.59	3	Horizontal	82	1.53	-
PK	5.1496G	55.41	74.00	-18.59	4.20	3	Horizontal	82	1.53	-
PK	5.2558G	118.35	Inf	-Inf	4.40	3	Horizontal	82	1.53	-
PK	5.3566G	56.64	74.00	-17.36	4.60	3	Horizontal	82	1.53	-

802.11a_Nss1,(6Mbps)_2TX

30/05/2019

5260MHz_TX

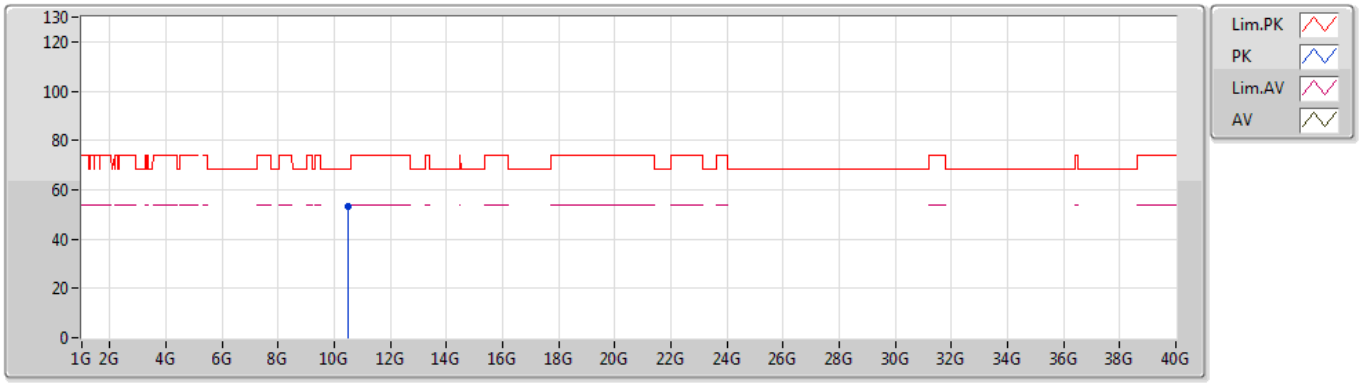


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.51868G	53.36	68.20	-14.84	15.22	3	Vertical	244	1.40	-

802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

30/05/2019

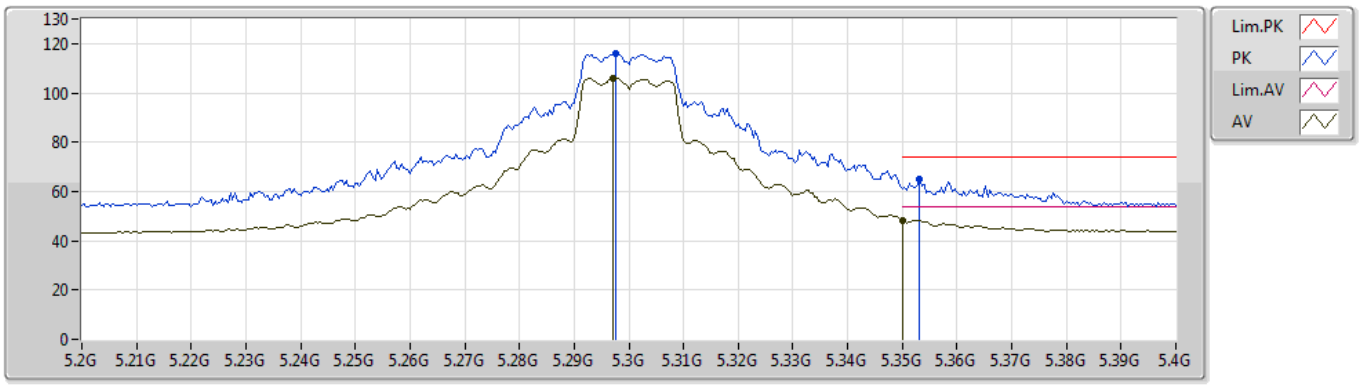


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.514G	53.36	68.20	-14.84	15.21	3	Horizontal	21	2.48	-

802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

30/05/2019

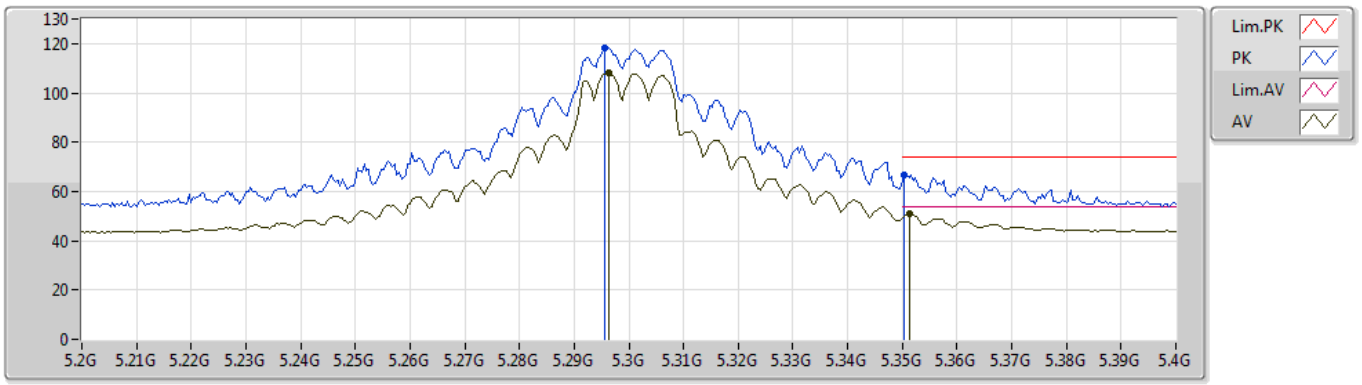


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.2972G	106.00	Inf	-Inf	4.48	3	Vertical	342	1.96	-
AV	5.35G	48.26	54.00	-5.74	4.59	3	Vertical	342	1.96	-
PK	5.2976G	116.24	Inf	-Inf	4.48	3	Vertical	342	1.96	-
PK	5.3532G	64.96	74.00	-9.04	4.59	3	Vertical	342	1.96	-

802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

30/05/2019

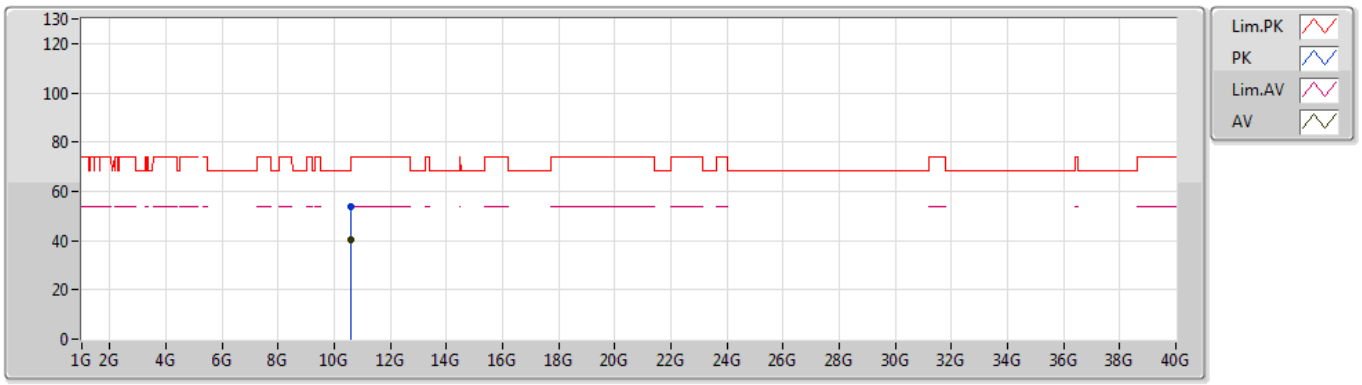


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.2964G	107.89	Inf	-Inf	4.48	3	Horizontal	78	1.71	-
AV	5.3512G	50.81	54.00	-3.19	4.59	3	Horizontal	78	1.71	-
PK	5.2956G	118.38	Inf	-Inf	4.48	3	Horizontal	78	1.71	-
PK	5.3504G	66.73	74.00	-7.27	4.59	3	Horizontal	78	1.71	-

802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

30/05/2019

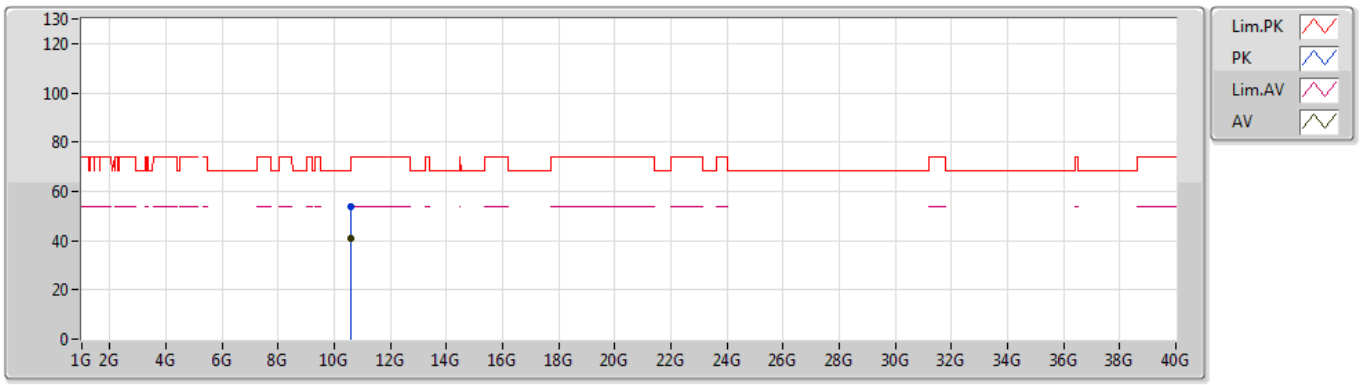


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.60648G	40.57	54.00	-13.43	15.42	3	Vertical	120	1.95	-
PK	10.59004G	54.01	68.20	-14.19	15.39	3	Vertical	120	1.95	-

802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

30/05/2019

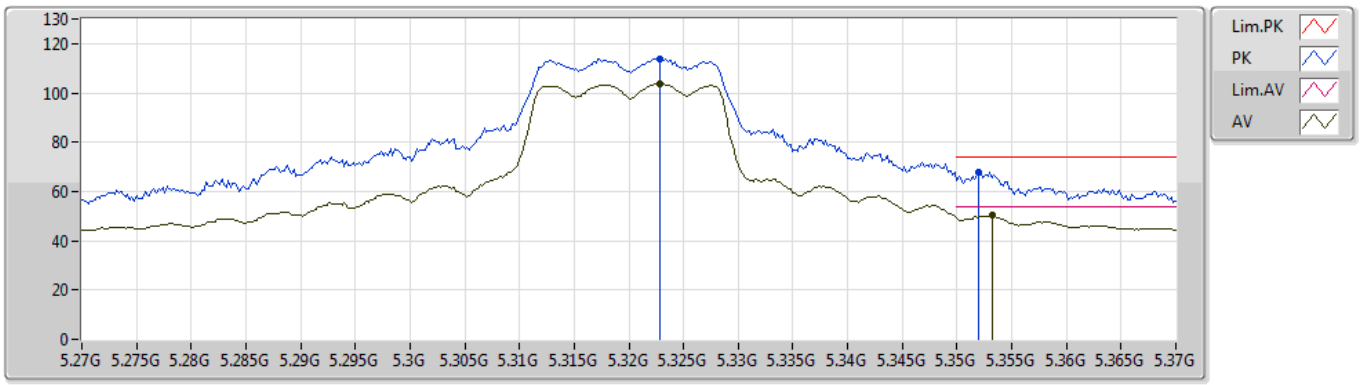


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.61338G	40.64	54.00	-13.36	15.44	3	Horizontal	51	1.74	-
PK	10.5979G	54.01	68.20	-14.19	15.41	3	Horizontal	51	1.74	-

802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

29/05/2019

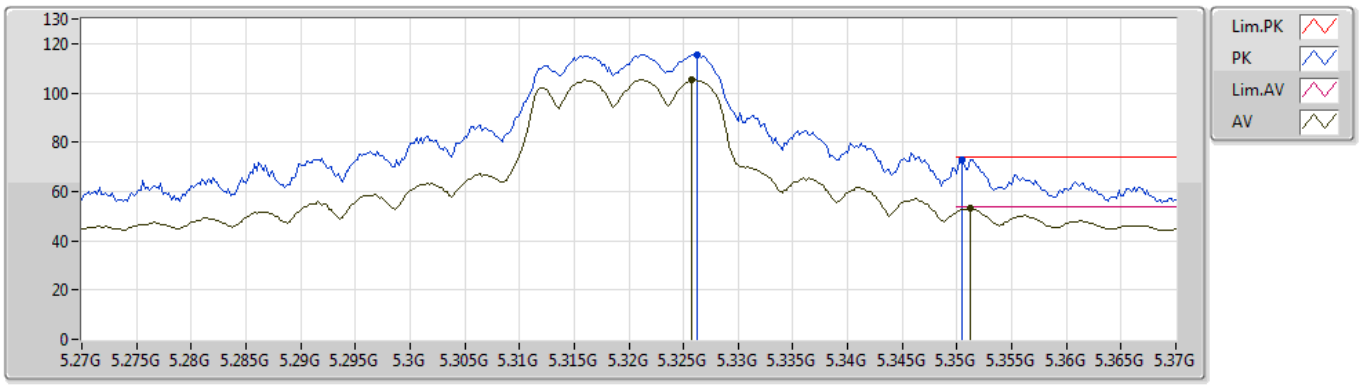


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3228G	103.70	Inf	-Inf	4.52	3	Vertical	331	2.13	-
AV	5.3532G	50.18	54.00	-3.82	4.59	3	Vertical	331	2.13	-
PK	5.3228G	113.95	Inf	-Inf	4.52	3	Vertical	331	2.13	-
PK	5.352G	67.91	74.00	-6.09	4.59	3	Vertical	331	2.13	-

802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

29/05/2019

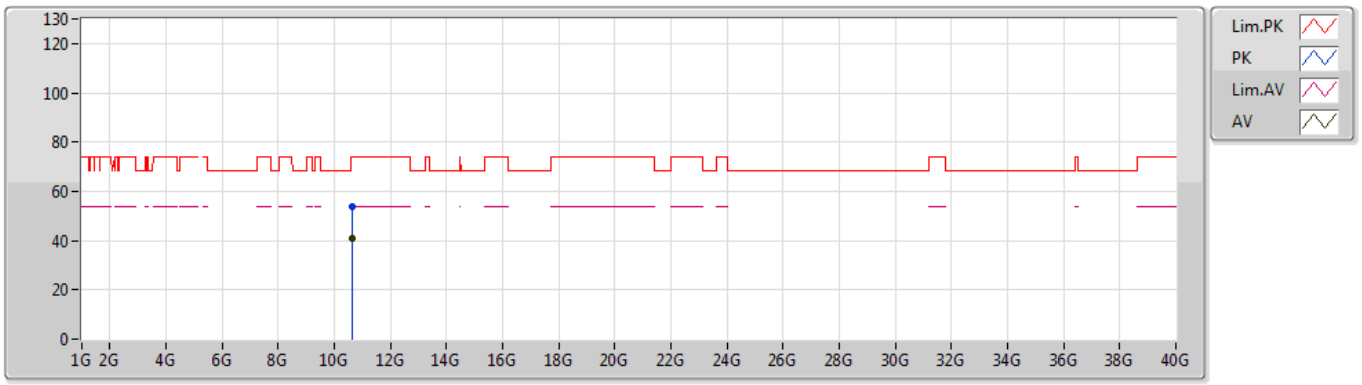


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3258G	105.35	Inf	-Inf	4.54	3	Horizontal	79	1.63	-
AV	5.3512G	53.11	54.00	-0.89	4.59	3	Horizontal	79	1.63	-
PK	5.3262G	115.67	Inf	-Inf	4.54	3	Horizontal	79	1.63	-
PK	5.3504G	72.84	74.00	-1.16	4.59	3	Horizontal	79	1.63	-

802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

30/05/2019

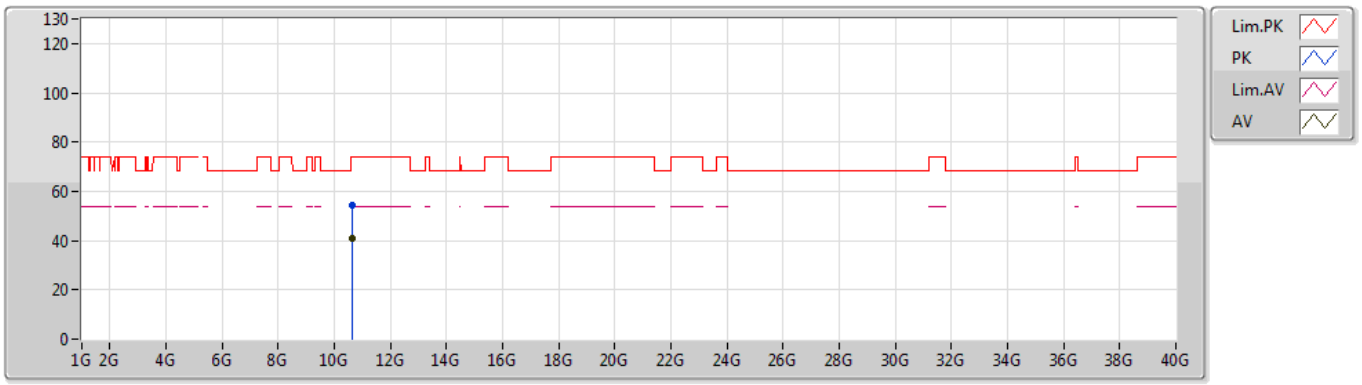


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.64384G	40.83	54.00	-13.17	15.51	3	Vertical	244	1.13	-
PK	10.62782G	53.89	74.00	-20.11	15.48	3	Vertical	244	1.13	-

802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

30/05/2019

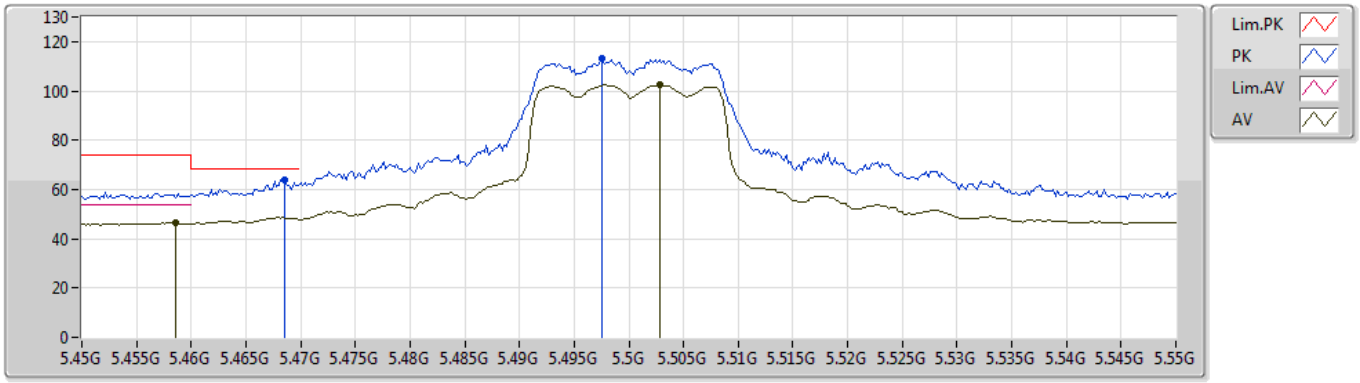


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.63322G	40.91	54.00	-13.09	15.50	3	Horizontal	125	2.32	-
PK	10.64138G	54.46	74.00	-19.54	15.51	3	Horizontal	125	2.32	-

802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

29/05/2019

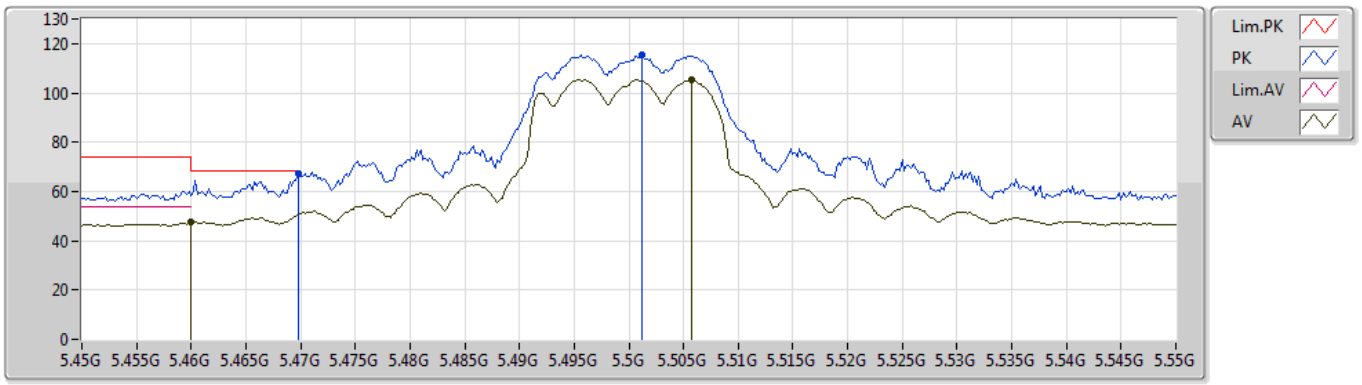


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4586G	46.78	54.00	-7.22	8.73	3	Vertical	16	1.01	-
AV	5.5028G	102.61	Inf	-Inf	8.55	3	Vertical	16	1.01	-
PK	5.4686G	64.12	68.20	-4.08	8.68	3	Vertical	16	1.01	-
PK	5.4976G	113.28	Inf	-Inf	8.54	3	Vertical	16	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

29/05/2019

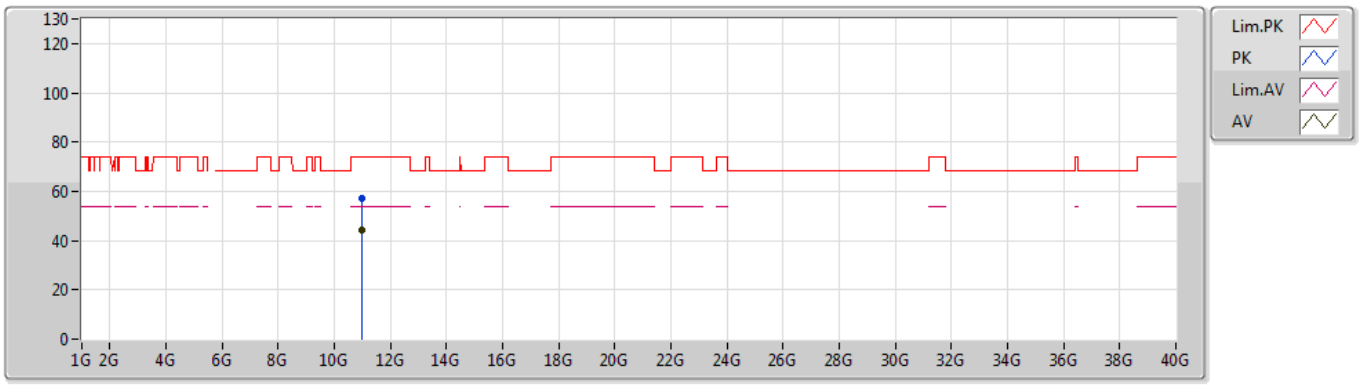


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	47.43	54.00	-6.57	8.72	3	Horizontal	283	1.03	-
AV	5.5058G	105.55	Inf	-Inf	8.57	3	Horizontal	283	1.03	-
PK	5.4698G	67.40	68.20	-0.80	8.67	3	Horizontal	283	1.03	-
PK	5.5012G	115.42	Inf	-Inf	8.54	3	Horizontal	283	1.03	-

802.11a_Nss1,(6Mbps)_2TX

30/05/2019

5500MHz_TX

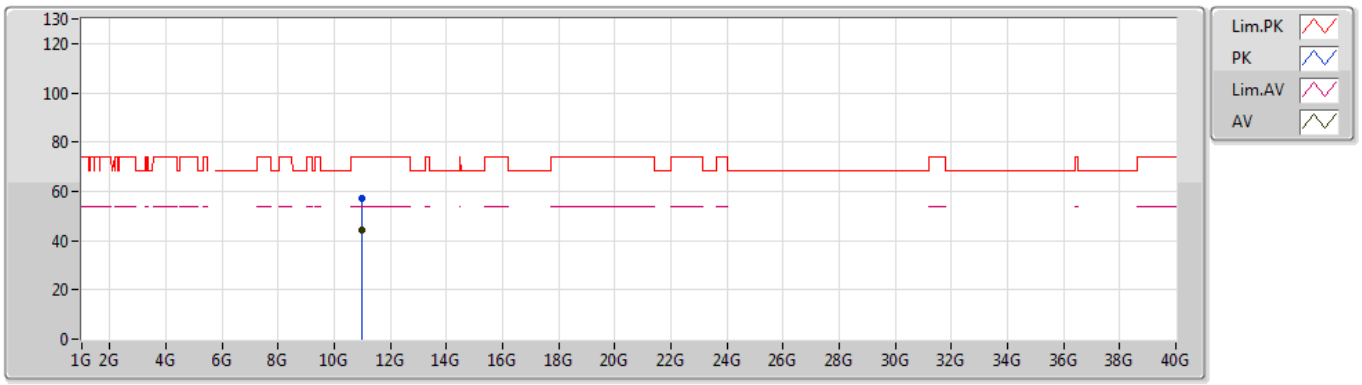


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.0024G	44.49	54.00	-9.51	19.09	3	Vertical	148	1.50	-
PK	10.99932G	57.11	74.00	-16.89	19.09	3	Vertical	148	1.50	-

802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

30/05/2019

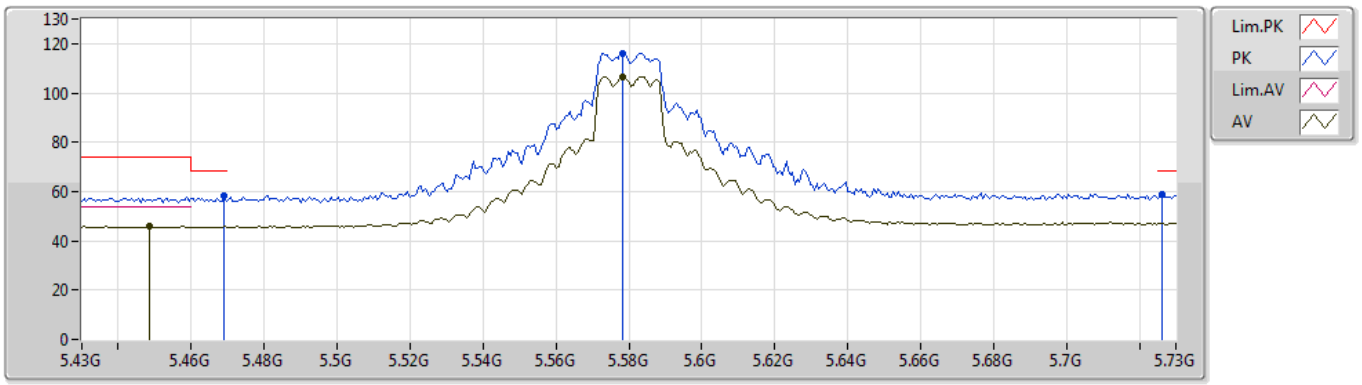


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.00063G	44.36	54.00	-9.64	19.09	3	Horizontal	109	2.39	-
PK	11.00056G	57.00	74.00	-17.00	19.09	3	Horizontal	109	2.39	-

802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

29/05/2019

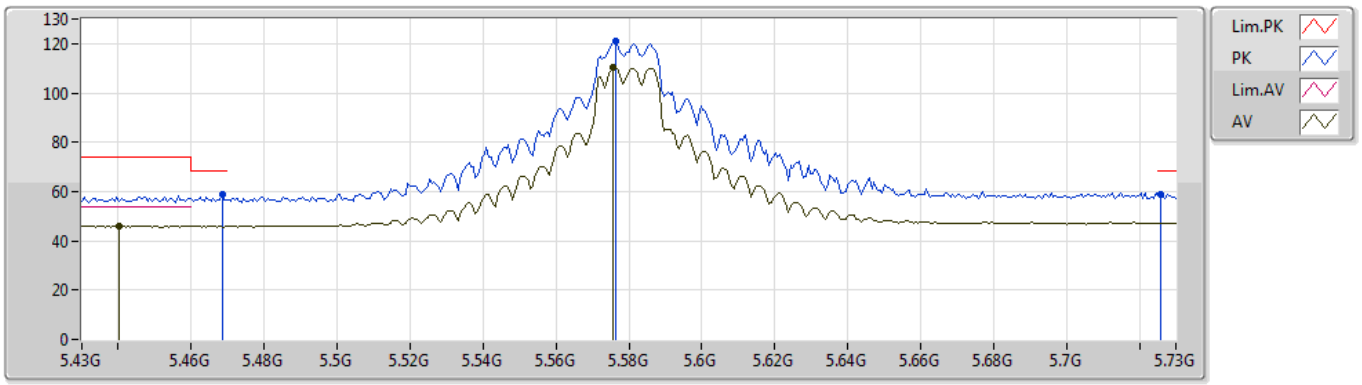


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4486G	45.87	54.00	-8.13	8.77	3	Vertical	19	1.01	-
AV	5.5782G	106.68	Inf	-Inf	9.15	3	Vertical	19	1.01	-
PK	5.469G	58.02	68.20	-10.18	8.68	3	Vertical	19	1.01	-
PK	5.5782G	116.12	Inf	-Inf	9.15	3	Vertical	19	1.01	-
PK	5.7264G	59.05	68.20	-9.15	9.56	3	Vertical	19	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

29/05/2019

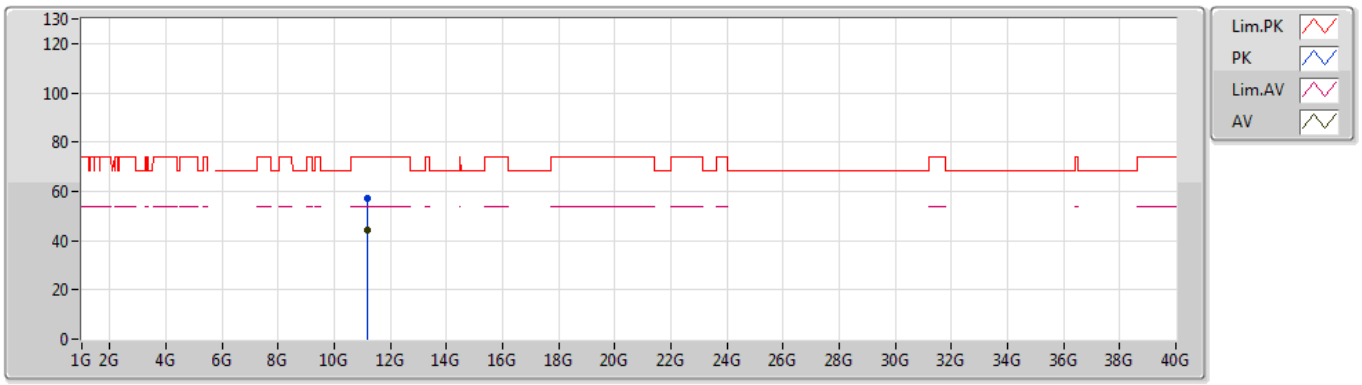


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4402G	46.19	54.00	-7.81	8.81	3	Horizontal	286	1.01	-
AV	5.5758G	110.11	Inf	-Inf	9.14	3	Horizontal	286	1.01	-
PK	5.4684G	58.58	68.20	-9.62	8.68	3	Horizontal	286	1.01	-
PK	5.5764G	120.88	Inf	-Inf	9.14	3	Horizontal	286	1.01	-
PK	5.7258G	59.11	68.20	-9.09	9.56	3	Horizontal	286	1.01	-

802.11a_Nss1,(6Mbps)_2TX

30/05/2019

5580MHz_TX

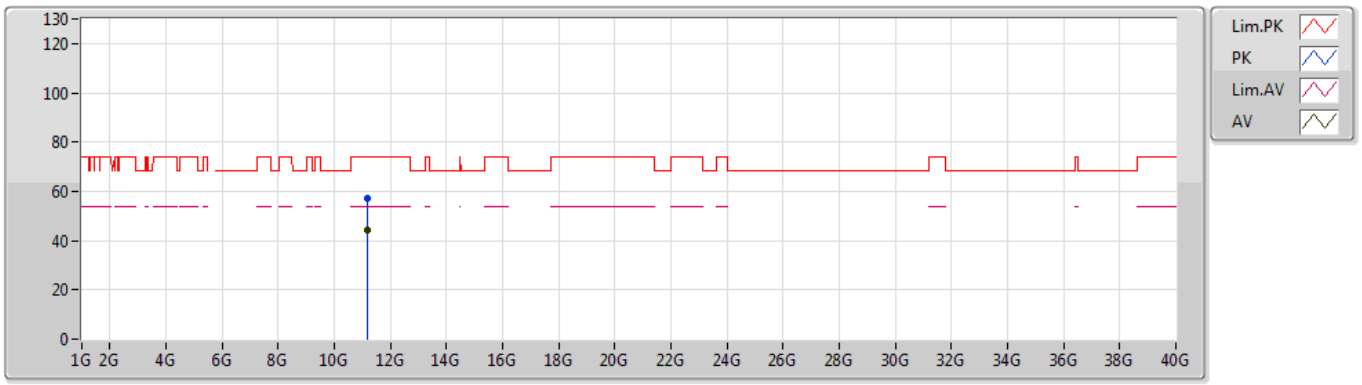


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.16071G	44.31	54.00	-9.69	18.96	3	Vertical	323	1.50	-
PK	11.16164G	57.30	74.00	-16.70	18.95	3	Vertical	323	1.50	-

802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

30/05/2019

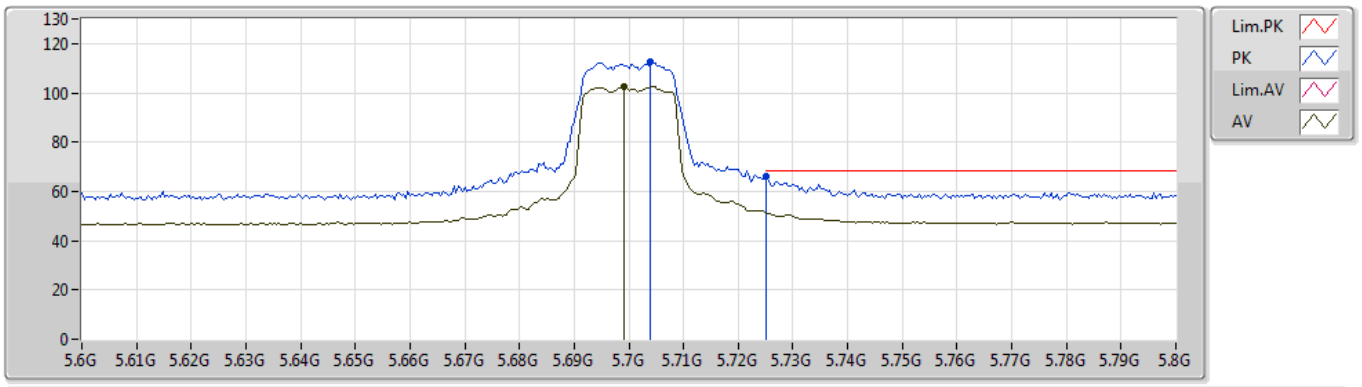


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.15887G	44.27	54.00	-9.73	18.96	3	Horizontal	360	1.03	-
PK	11.16123G	57.09	74.00	-16.91	18.95	3	Horizontal	360	1.03	-

802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

29/05/2019

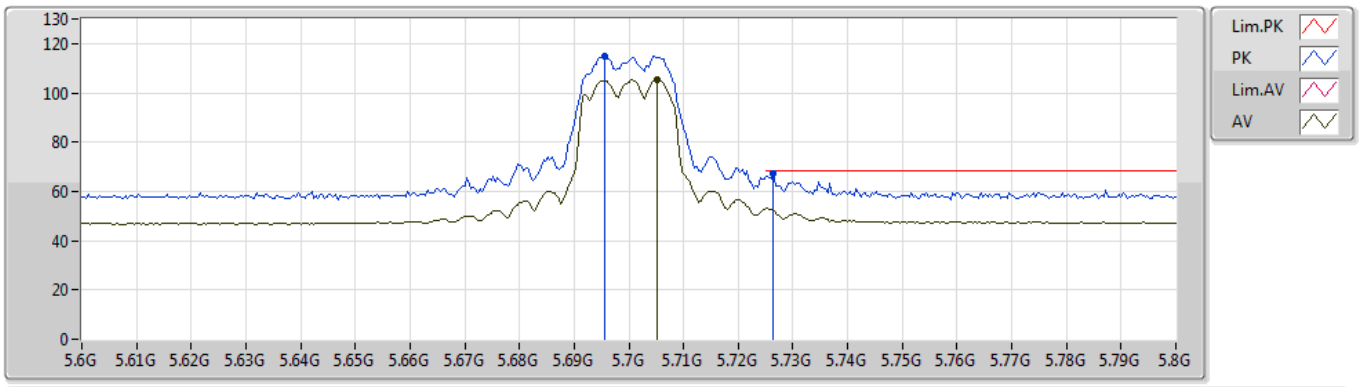


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.6992G	102.61	Inf	-Inf	9.51	3	Vertical	55	1.01	-
PK	5.704G	112.46	Inf	-Inf	9.53	3	Vertical	55	1.01	-
PK	5.7252G	66.34	68.20	-1.86	9.56	3	Vertical	55	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

29/05/2019

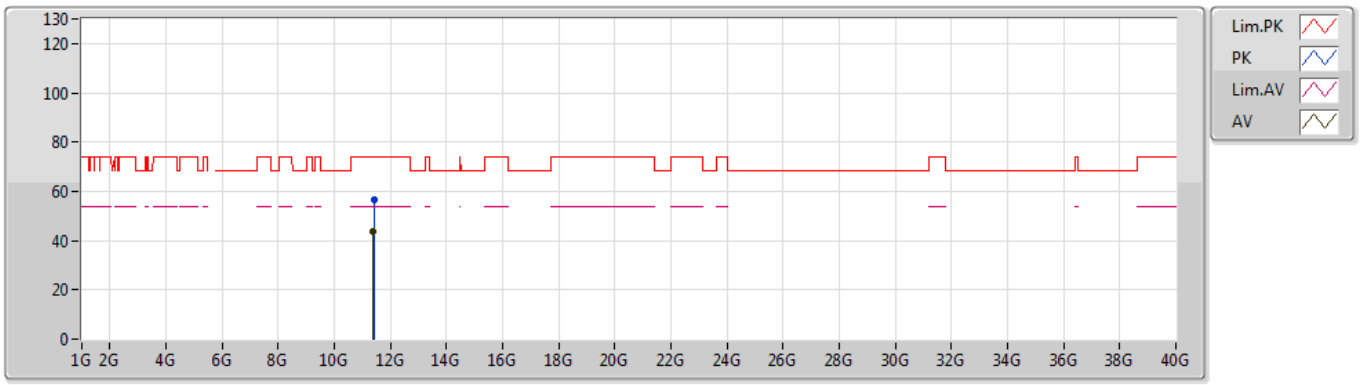


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.7052G	105.25	Inf	-Inf	9.53	3	Horizontal	283	1.01	-
PK	5.6956G	114.88	Inf	-Inf	9.50	3	Horizontal	283	1.01	-
PK	5.7264G	67.24	68.20	-0.96	9.56	3	Horizontal	283	1.01	-

802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

30/05/2019

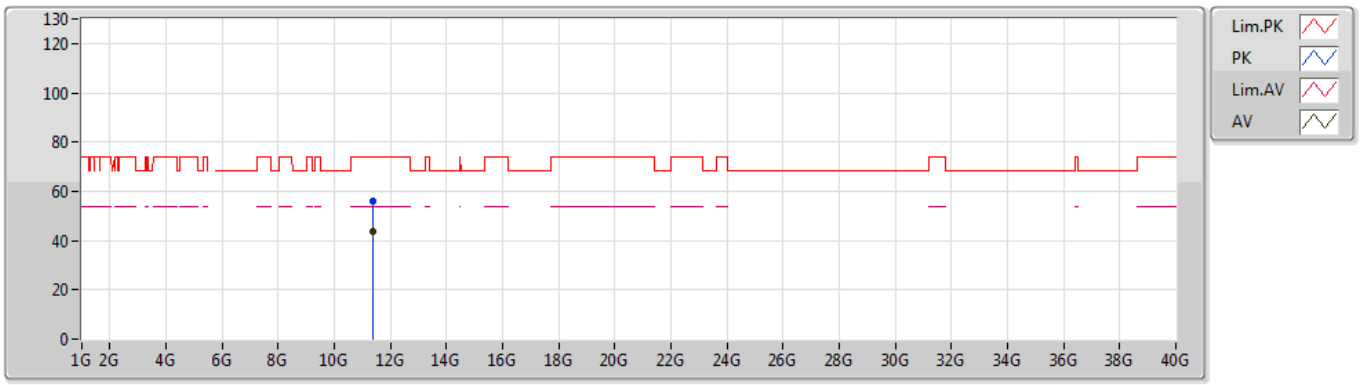


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.40029G	43.87	54.00	-10.13	18.77	3	Vertical	0	1.50	-
PK	11.40221G	56.86	74.00	-17.14	18.77	3	Vertical	0	1.50	-

802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

30/05/2019

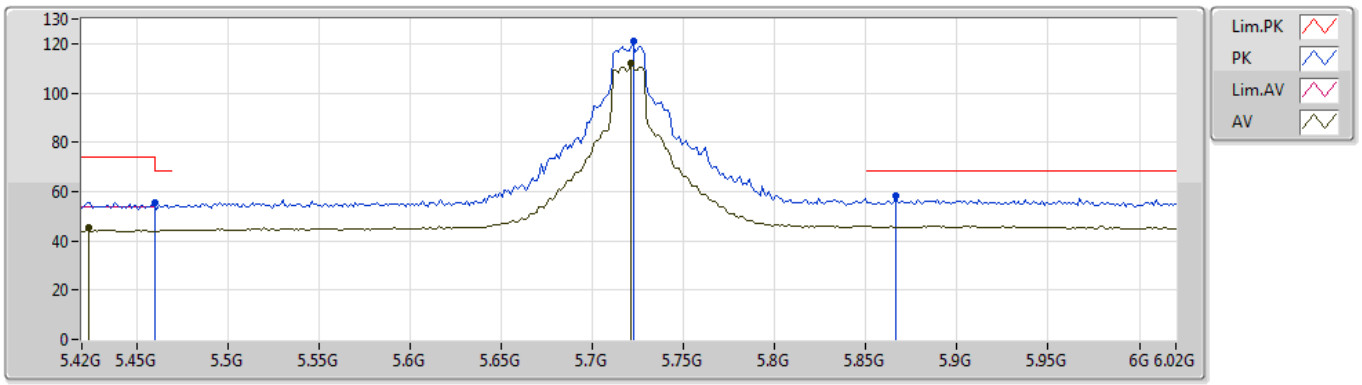


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.40016G	43.96	54.00	-10.04	18.77	3	Horizontal	85	1.55	-
PK	11.39975G	56.27	74.00	-17.73	18.77	3	Horizontal	85	1.55	-

802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.47-5.725GHz_TX

17/06/2019

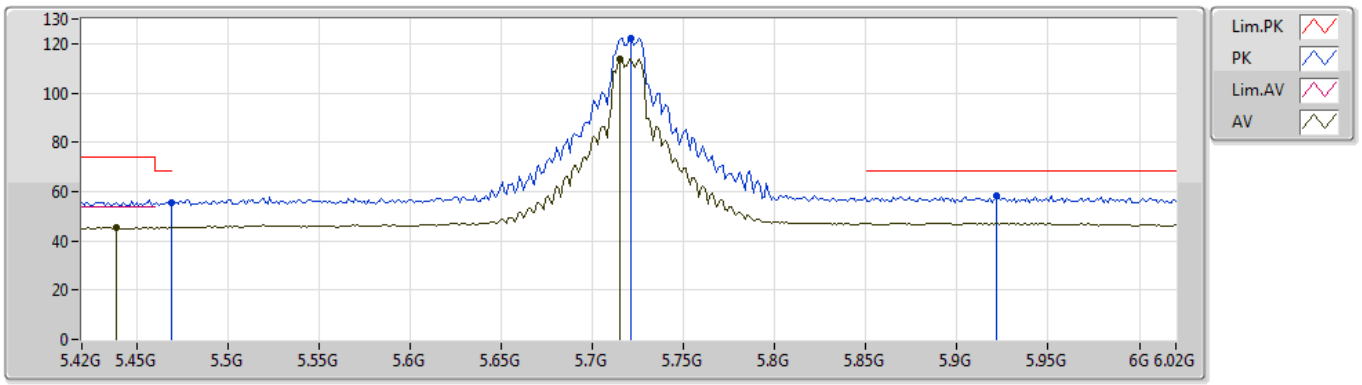


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4236G	45.41	54.00	-8.59	9.03	3	Vertical	360	1.46	-
AV	5.7212G	111.89	Inf	-Inf	9.53	3	Vertical	360	1.46	-
PK	5.46G	55.63	68.20	-12.57	9.23	3	Vertical	360	1.46	-
PK	5.7224G	121.09	Inf	-Inf	9.53	3	Vertical	360	1.46	-
PK	5.8664G	58.48	68.20	-9.72	9.92	3	Vertical	360	1.46	-

802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.47-5.725GHz_TX

17/06/2019

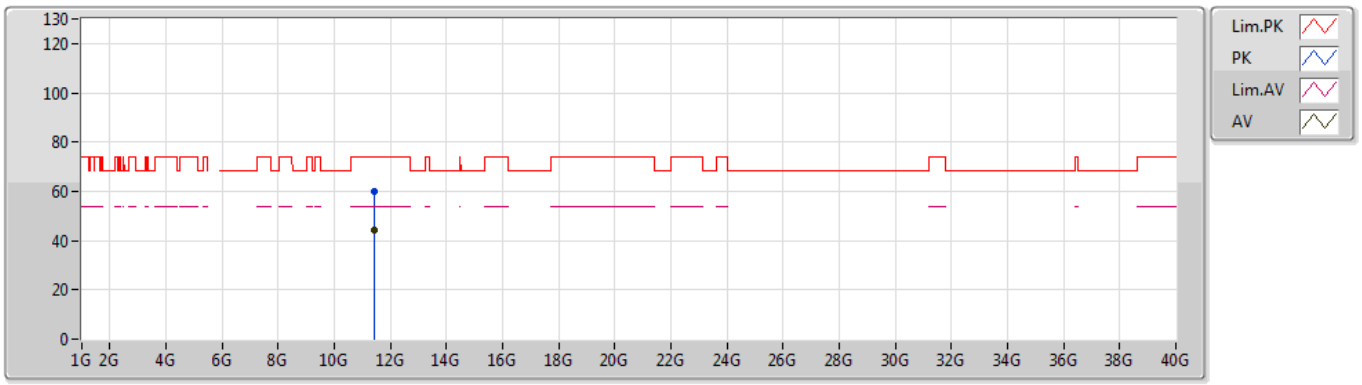


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4392G	45.35	54.00	-8.65	9.12	3	Horizontal	80	2.11	-
AV	5.7152G	113.85	Inf	-Inf	9.51	3	Horizontal	80	2.11	-
PK	5.4692G	55.72	68.20	-12.48	9.28	3	Horizontal	80	2.11	-
PK	5.7212G	122.31	Inf	-Inf	9.53	3	Horizontal	80	2.11	-
PK	5.9216G	58.36	68.20	-9.84	10.05	3	Horizontal	80	2.11	-

802.11a_Nss1,(6Mbps)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

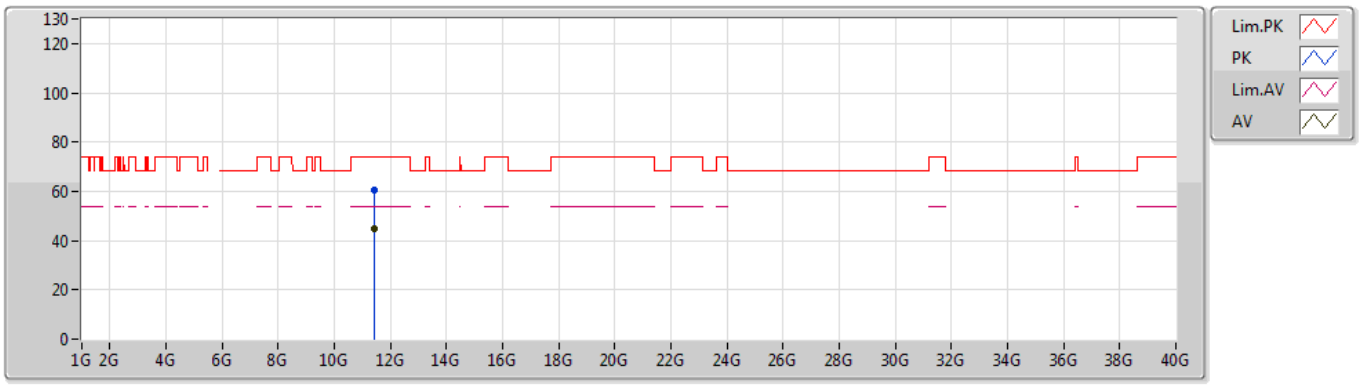


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.43598G	44.50	54.00	-9.50	17.95	3	Vertical	350	1.50	-
PK	11.42572G	59.92	74.00	-14.08	17.95	3	Vertical	350	1.50	-

802.11a_Nss1,(6Mbps)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

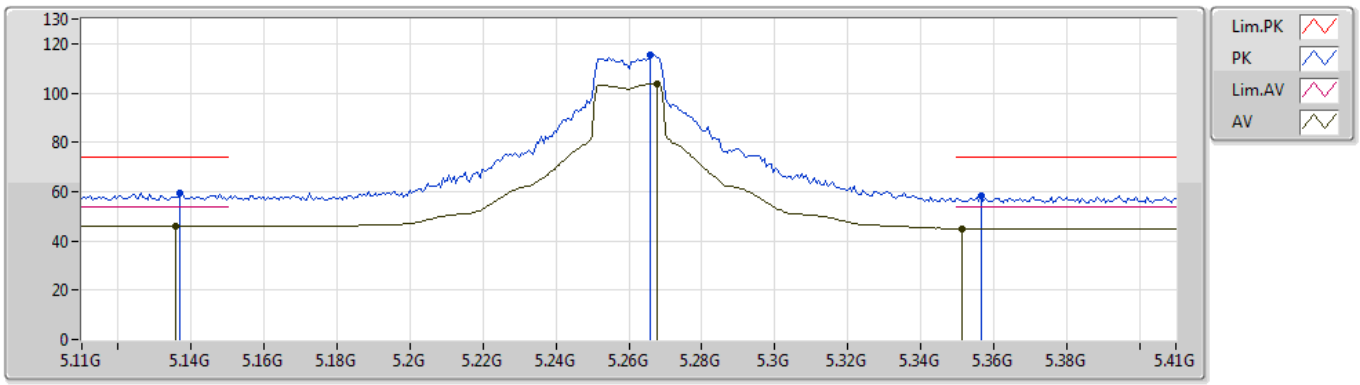


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.43988G	44.60	54.00	-5.43	21.91	3	Horizontal	353	1.44	-
PK	11.44282G	60.48	74.00	-13.52	21.91	3	Horizontal	353	1.44	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5260MHz_TX

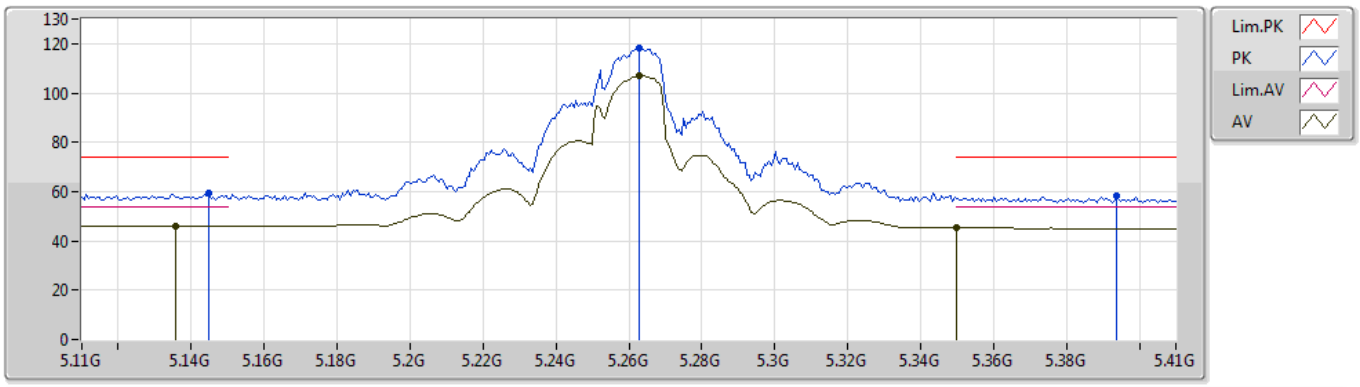


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1358G	46.00	54.00	-8.00	8.60	3	Vertical	31	1.00	-
AV	5.2678G	103.84	Inf	-Inf	8.80	3	Vertical	31	1.00	-
AV	5.3512G	45.10	54.00	-8.90	8.92	3	Vertical	31	1.00	-
PK	5.137G	59.37	74.00	-14.63	8.60	3	Vertical	31	1.00	-
PK	5.266G	115.63	Inf	-Inf	8.80	3	Vertical	31	1.00	-
PK	5.3566G	58.48	74.00	-15.52	8.92	3	Vertical	31	1.00	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5260MHz_TX

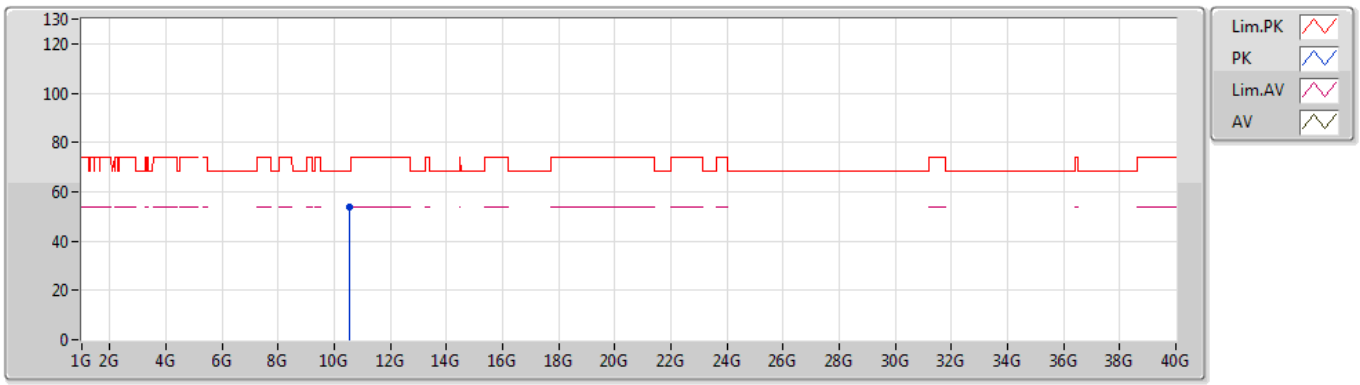


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1358G	46.03	54.00	-7.97	8.60	3	Horizontal	283	1.01	-
AV	5.263G	106.96	Inf	-Inf	8.79	3	Horizontal	283	1.01	-
AV	5.35G	45.33	54.00	-8.67	8.92	3	Horizontal	283	1.01	-
PK	5.1448G	59.17	74.00	-14.83	8.62	3	Horizontal	283	1.01	-
PK	5.263G	118.08	Inf	-Inf	8.79	3	Horizontal	283	1.01	-
PK	5.3938G	58.54	74.00	-15.46	8.99	3	Horizontal	283	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5260MHz_TX

30/05/2019

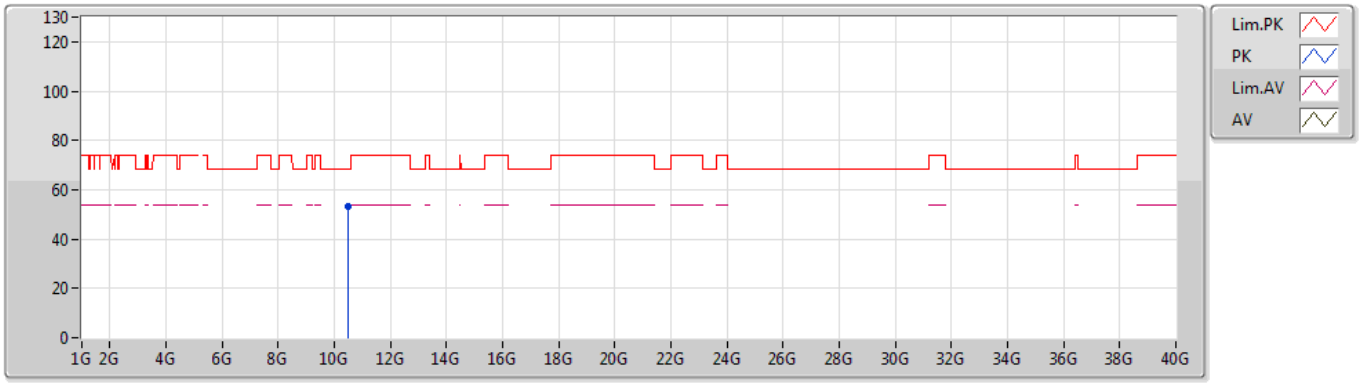


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.5287G	53.58	68.20	-14.62	15.24	3	Vertical	348	1.55	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5260MHz_TX

30/05/2019

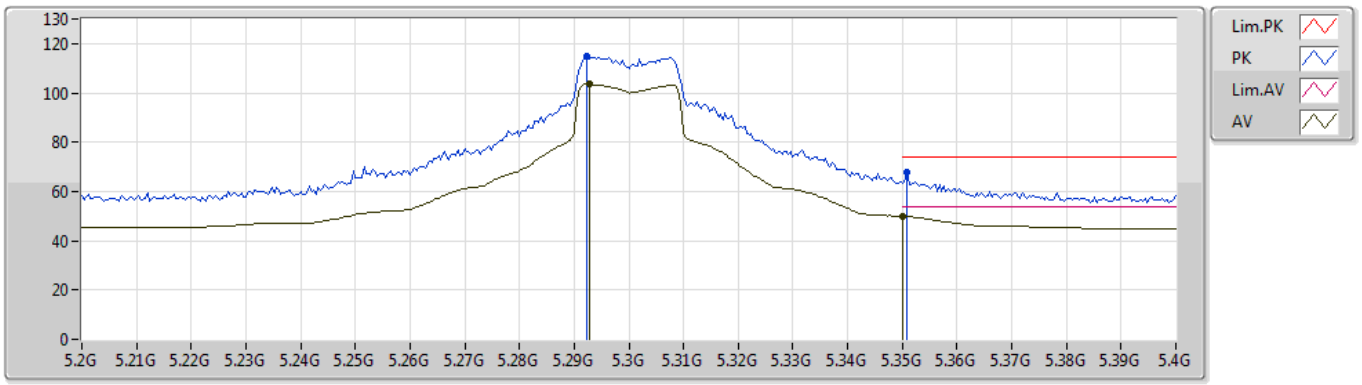


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.51472G	53.11	68.20	-15.09	15.21	3	Horizontal	67	1.10	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5300MHz_TX

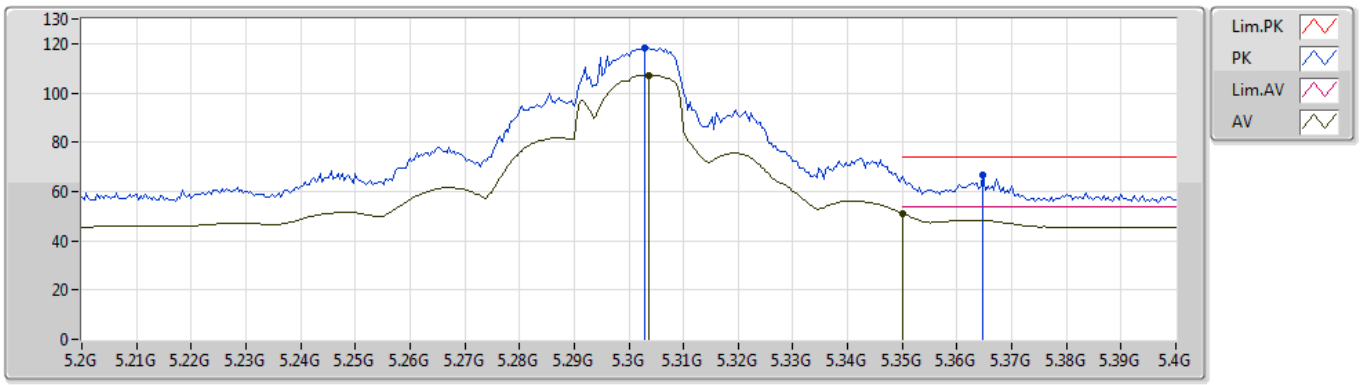


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.2928G	103.52	Inf	-Inf	8.84	3	Vertical	35	1.01	-
AV	5.35G	49.89	54.00	-4.11	8.92	3	Vertical	35	1.01	-
PK	5.2924G	114.94	Inf	-Inf	8.84	3	Vertical	35	1.01	-
PK	5.3508G	67.84	74.00	-6.16	8.92	3	Vertical	35	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5300MHz_TX

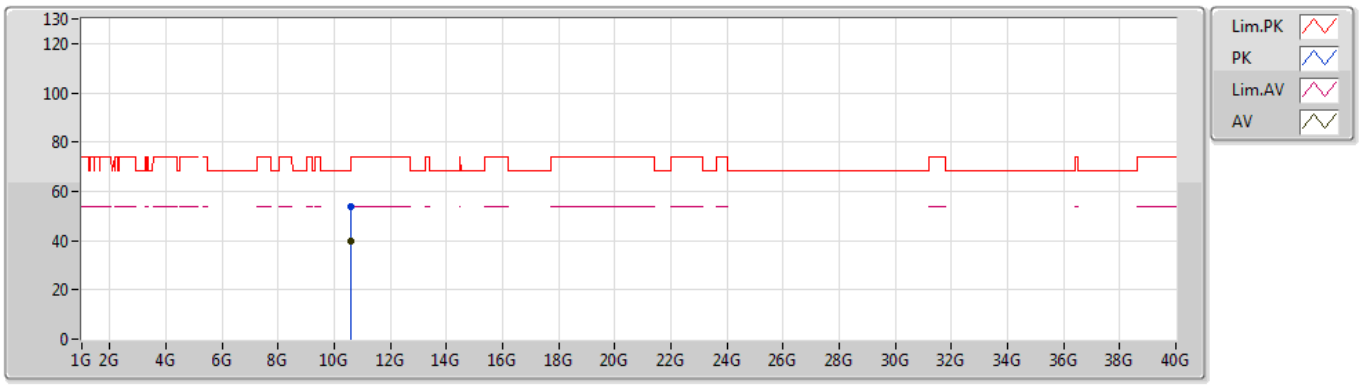


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3036G	107.27	Inf	-Inf	8.84	3	Horizontal	285	1.01	-
AV	5.35G	51.12	54.00	-2.88	8.92	3	Horizontal	285	1.01	-
PK	5.3028G	118.30	Inf	-Inf	8.84	3	Horizontal	285	1.01	-
PK	5.3648G	66.59	74.00	-7.41	8.94	3	Horizontal	285	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5300MHz_TX

30/05/2019

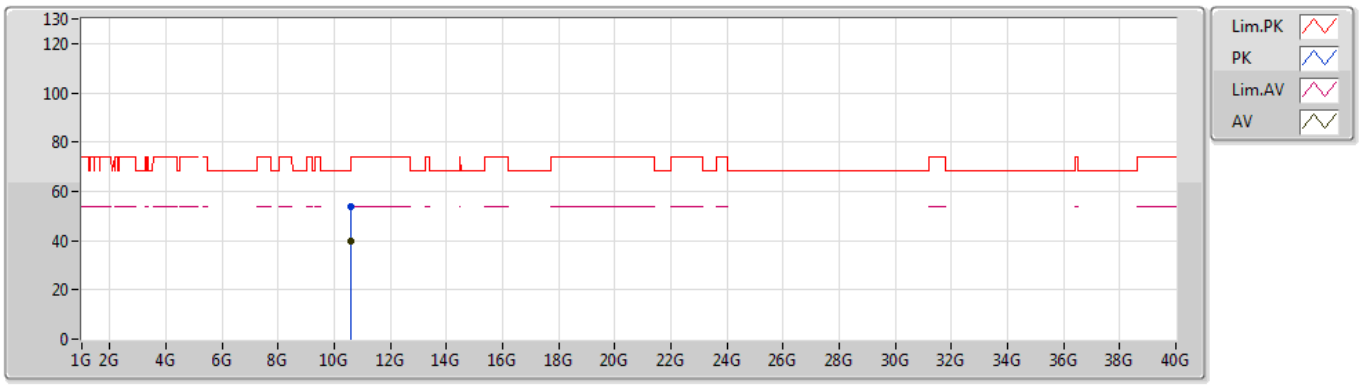


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.61098G	39.81	54.00	-14.19	15.44	3	Vertical	312	2.19	-
PK	10.61308G	53.67	74.00	-20.33	15.44	3	Vertical	312	2.19	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5300MHz_TX

30/05/2019

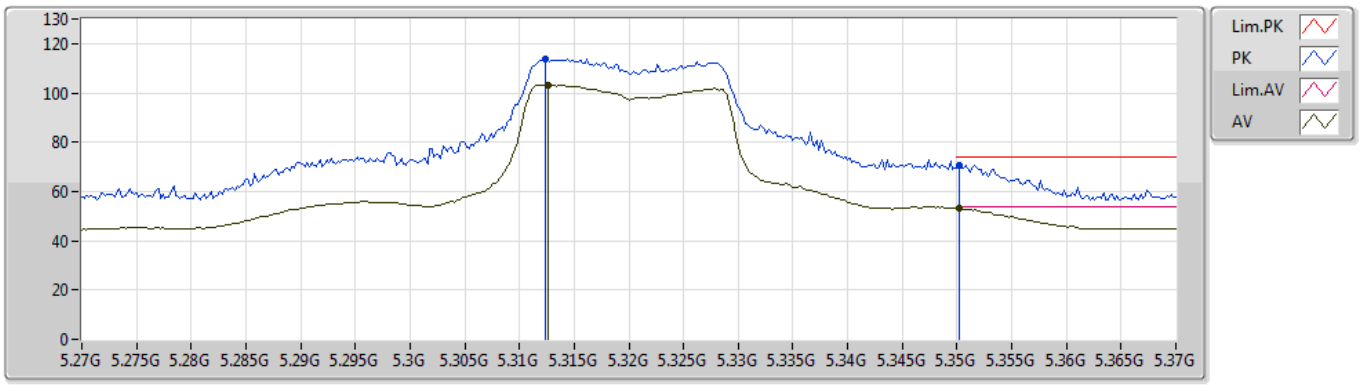


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.61104G	39.79	54.00	-14.21	15.44	3	Horizontal	353	1.83	-
PK	10.61146G	53.91	74.00	-20.09	15.44	3	Horizontal	353	1.83	-

802.11ac VHT20_Nss1,(MCS0)_2TX

30/05/2019

5320MHz_TX

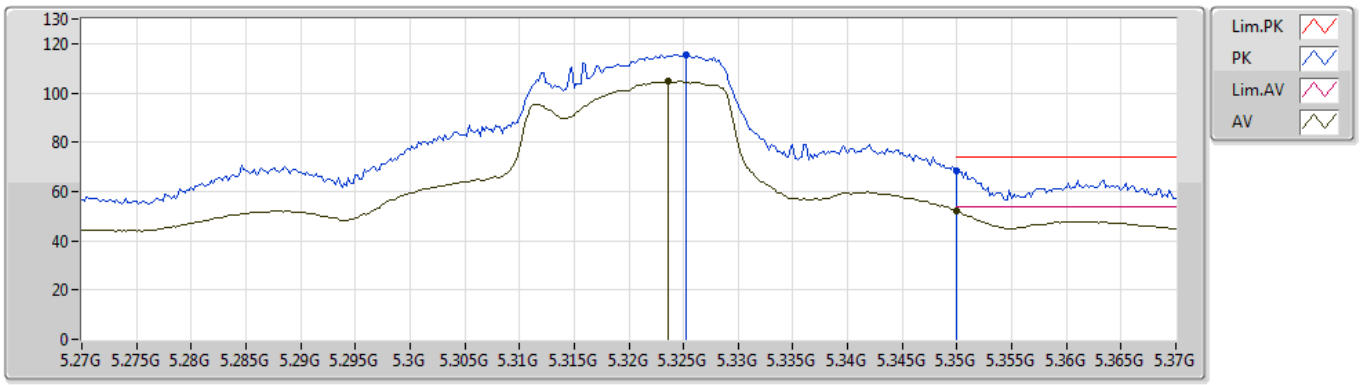


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3126G	103.14	Inf	-Inf	4.51	3	Vertical	333	2.01	-
AV	5.3502G	53.06	54.00	-0.94	4.59	3	Vertical	333	2.01	-
PK	5.3124G	113.97	Inf	-Inf	4.51	3	Vertical	333	2.01	-
PK	5.3502G	70.57	74.00	-3.43	4.59	3	Vertical	333	2.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5320MHz_TX

30/05/2019

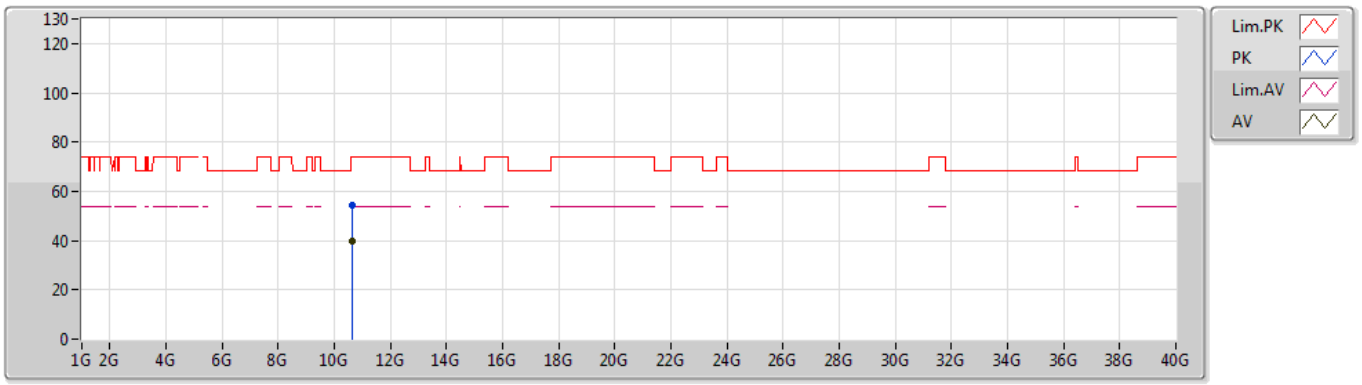


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3236G	104.58	Inf	-Inf	4.52	3	Horizontal	85	1.64	-
AV	5.35G	51.94	54.00	-2.06	4.59	3	Horizontal	85	1.64	-
PK	5.3252G	115.71	Inf	-Inf	4.54	3	Horizontal	85	1.64	-
PK	5.35G	68.17	74.00	-5.83	4.59	3	Horizontal	85	1.64	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5320MHz_TX

30/05/2019

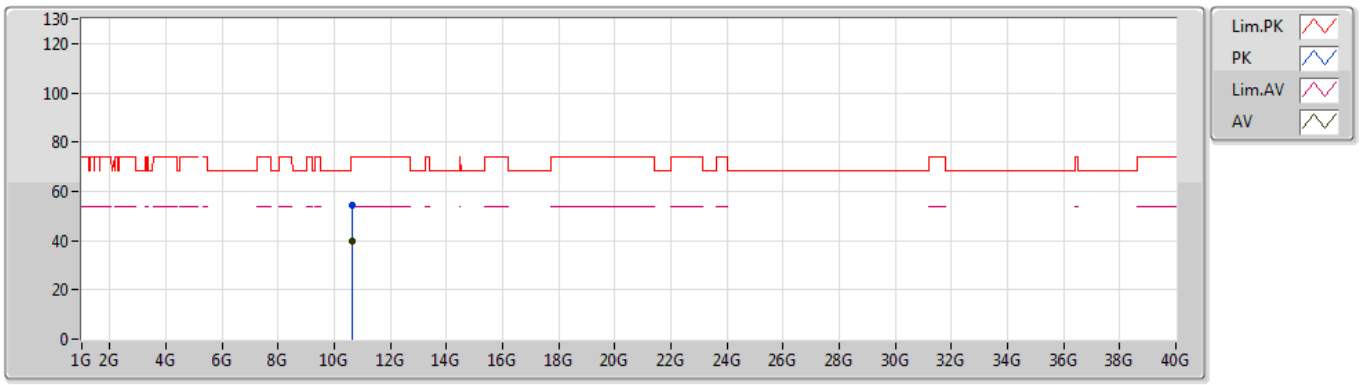


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.65404G	40.01	54.00	-13.99	15.54	3	Vertical	286	1.60	-
PK	10.63616G	54.24	74.00	-19.76	15.50	3	Vertical	286	1.60	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5320MHz_TX

30/05/2019

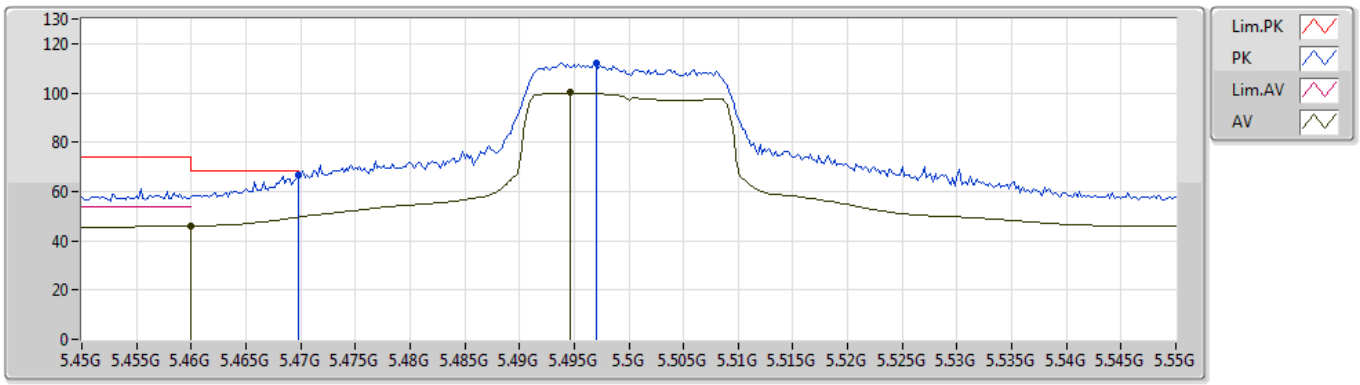


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.65398G	40.00	54.00	-14.00	15.54	3	Horizontal	95	1.62	-
PK	10.63838G	54.19	74.00	-19.81	15.50	3	Horizontal	95	1.62	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5500MHz_TX

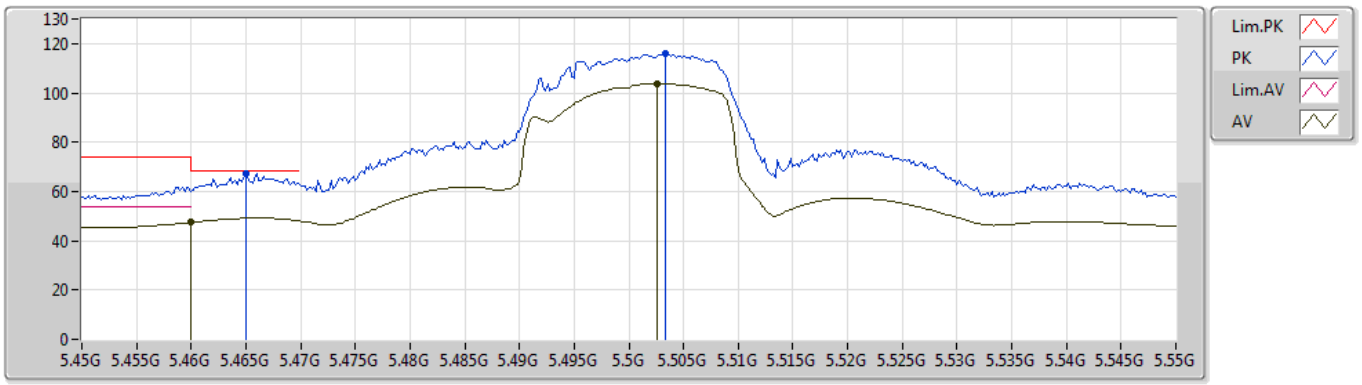


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	45.97	54.00	-8.03	8.72	3	Vertical	29	1.03	-
AV	5.4946G	100.03	Inf	-Inf	8.56	3	Vertical	29	1.03	-
PK	5.4698G	66.50	68.20	-1.70	8.67	3	Vertical	29	1.03	-
PK	5.497G	112.20	Inf	-Inf	8.55	3	Vertical	29	1.03	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5500MHz_TX

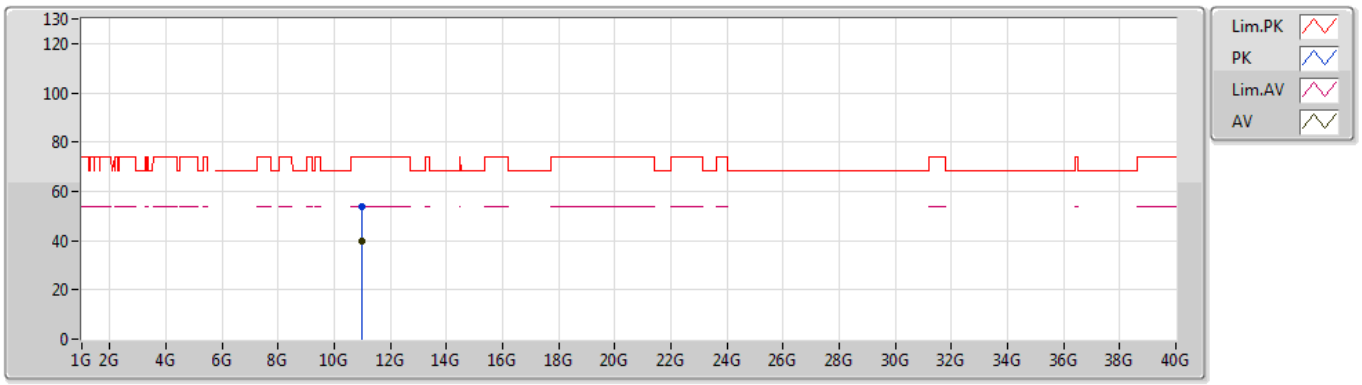


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	47.43	54.00	-6.57	8.72	3	Horizontal	284	1.01	-
AV	5.5026G	103.67	Inf	-Inf	8.55	3	Horizontal	284	1.01	-
PK	5.465G	67.28	68.20	-0.92	8.69	3	Horizontal	284	1.01	-
PK	5.5034G	116.00	Inf	-Inf	8.55	3	Horizontal	284	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5500MHz_TX

30/05/2019

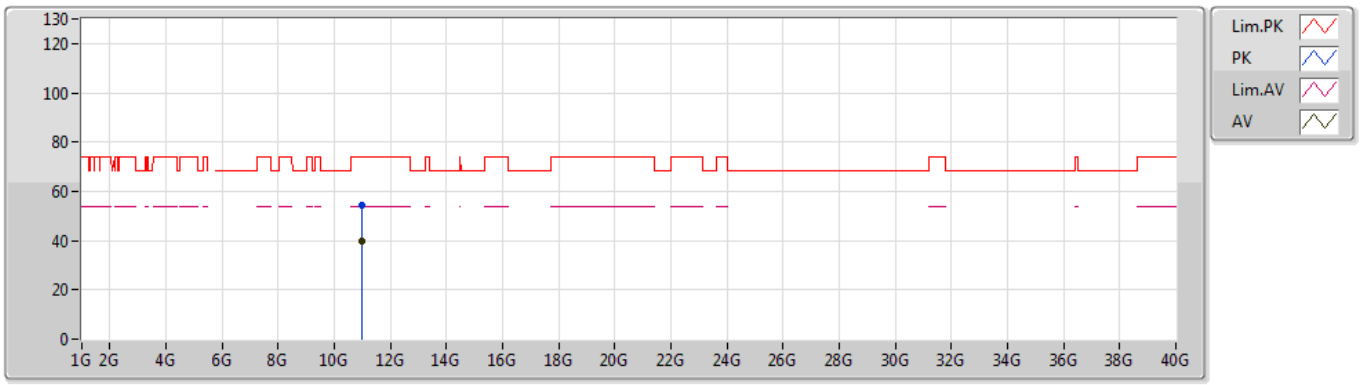


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.99154G	39.92	54.00	-14.08	16.35	3	Vertical	138	2.20	-
PK	10.99544G	53.73	74.00	-20.27	16.36	3	Vertical	138	2.20	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5500MHz_TX

30/05/2019

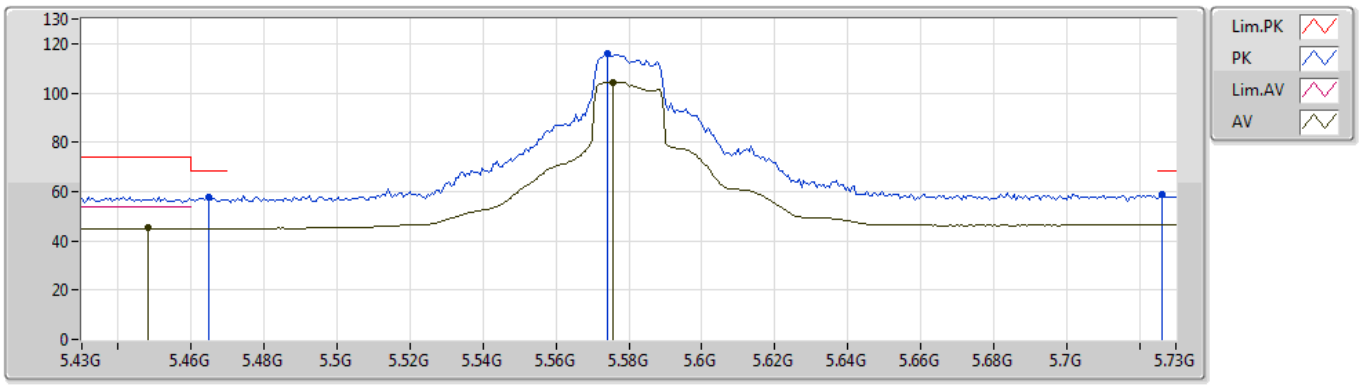


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.99418G	39.92	54.00	-14.08	16.36	3	Horizontal	317	1.29	-
PK	11.00714G	54.52	74.00	-19.48	16.37	3	Horizontal	317	1.29	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5580MHz_TX

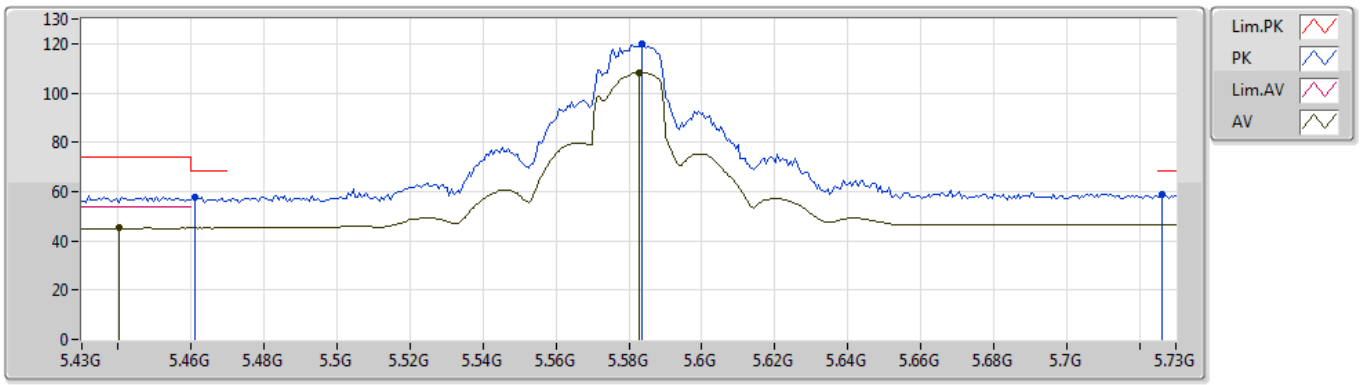


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.448G	45.13	54.00	-8.87	8.77	3	Vertical	25	1.01	-
AV	5.5758G	104.43	Inf	-Inf	9.14	3	Vertical	25	1.01	-
PK	5.4648G	57.90	68.20	-10.30	8.69	3	Vertical	25	1.01	-
PK	5.574G	115.83	Inf	-Inf	9.12	3	Vertical	25	1.01	-
PK	5.7264G	58.79	68.20	-9.41	9.56	3	Vertical	25	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

29/05/2019

5580MHz_TX

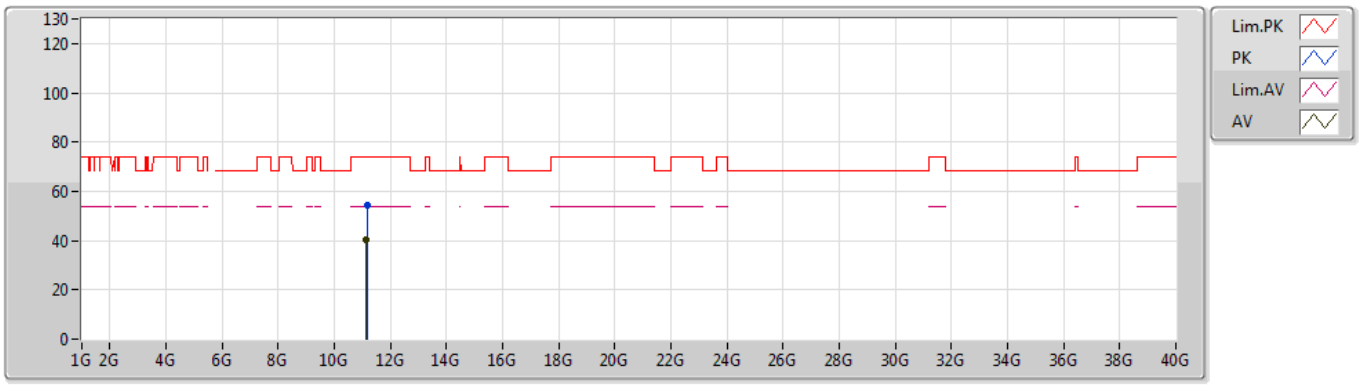


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4402G	45.50	54.00	-8.50	8.81	3	Horizontal	278	1.02	-
AV	5.583G	108.32	Inf	-Inf	9.19	3	Horizontal	278	1.02	-
PK	5.4612G	57.74	68.20	-10.46	8.71	3	Horizontal	278	1.02	-
PK	5.5836G	120.09	Inf	-Inf	9.19	3	Horizontal	278	1.02	-
PK	5.7264G	58.72	68.20	-9.48	9.56	3	Horizontal	278	1.02	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5580MHz_TX

30/05/2019

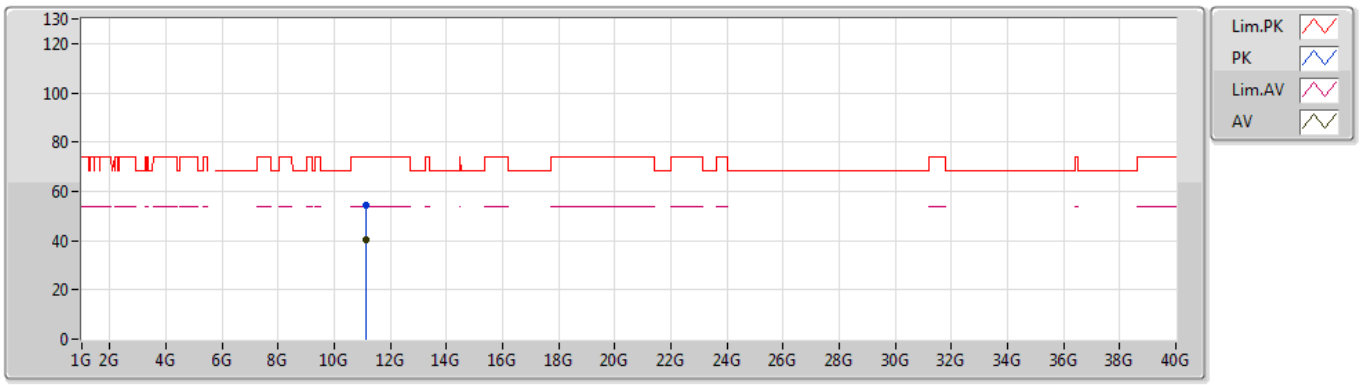


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.1513G	40.41	54.00	-13.59	16.20	3	Vertical	343	1.18	-
PK	11.16948G	54.17	74.00	-19.83	16.17	3	Vertical	343	1.18	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5580MHz_TX

30/05/2019

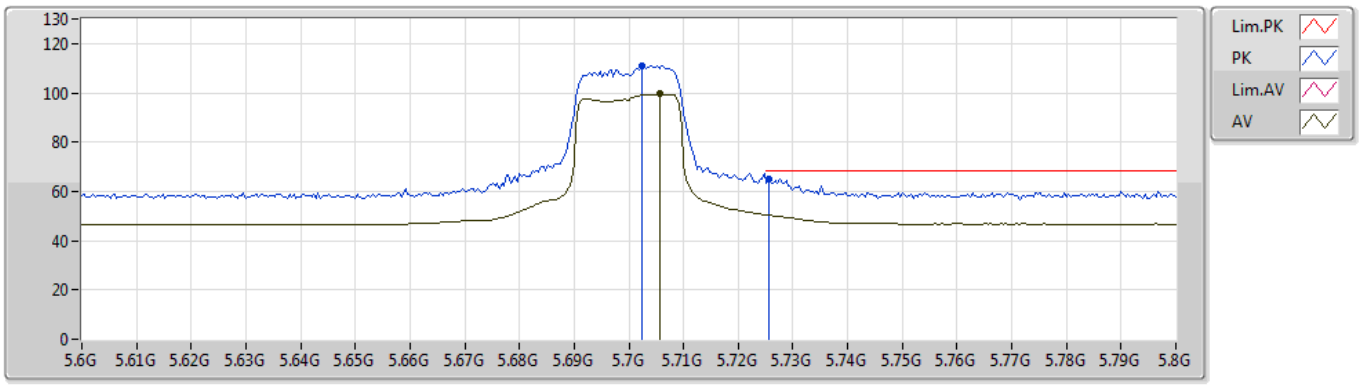


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.14908G	40.42	54.00	-13.58	16.20	3	Horizontal	15	2.41	-
PK	11.14962G	54.58	74.00	-19.42	16.20	3	Horizontal	15	2.41	-

802.11ac VHT20_Nss1,(MCS0)_2TX

30/05/2019

5700MHz_TX

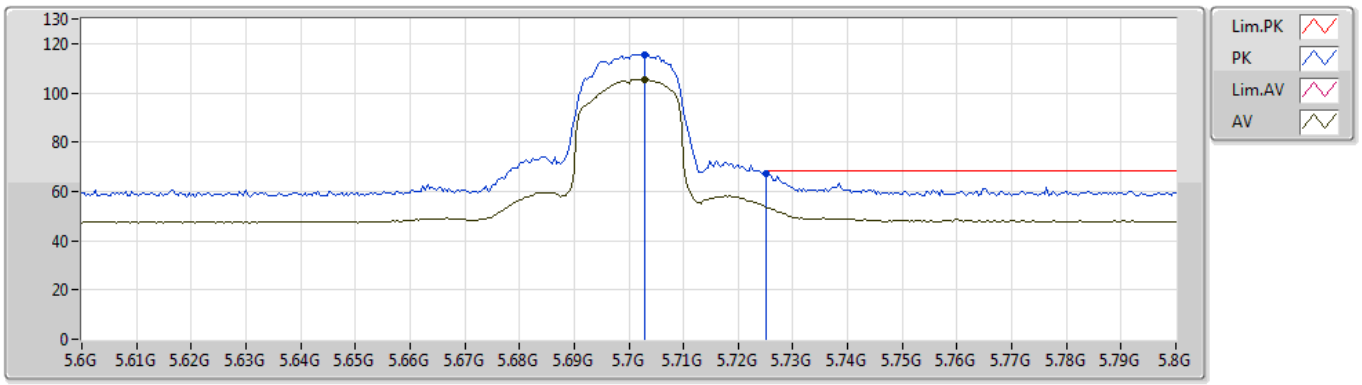


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.7056G	99.51	Inf	-Inf	9.95	3	Vertical	1	1.50	-
PK	5.7024G	110.74	Inf	-Inf	9.94	3	Vertical	1	1.50	-
PK	5.7256G	65.15	68.20	-3.05	9.98	3	Vertical	1	1.50	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5700MHz_TX

30/05/2019

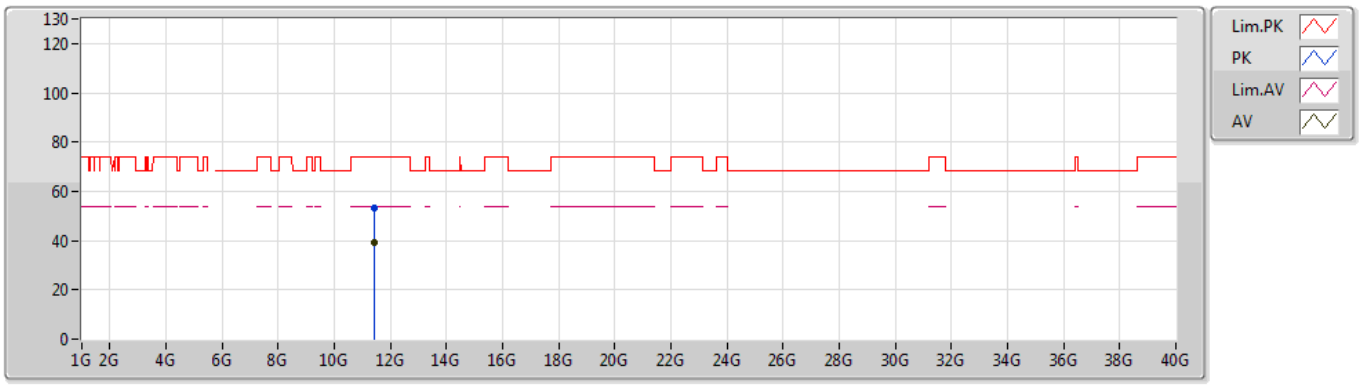


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.7028G	105.62	Inf	-Inf	9.94	3	Horizontal	283	1.01	-
PK	5.7028G	115.33	Inf	-Inf	9.94	3	Horizontal	283	1.01	-
PK	5.7252G	67.06	68.20	-1.14	9.98	3	Horizontal	283	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5700MHz_TX

30/05/2019

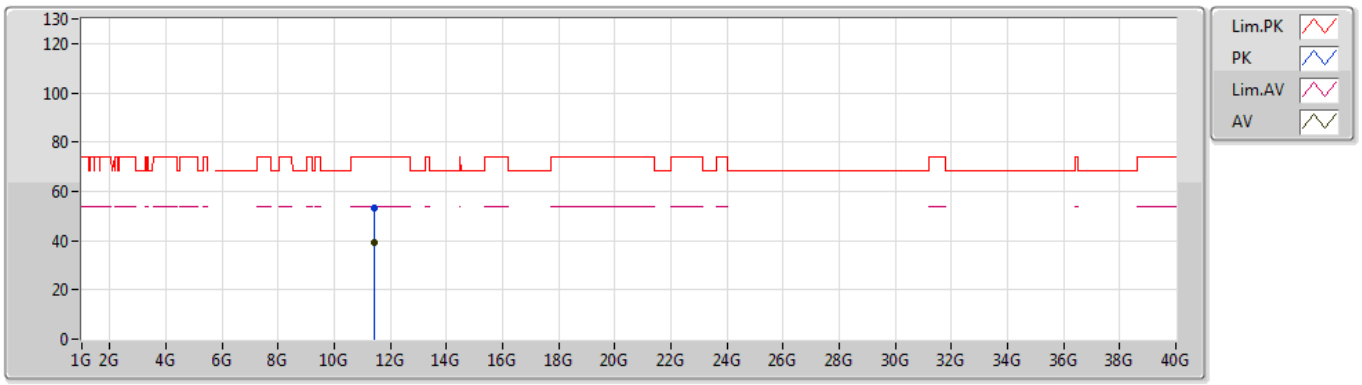


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.41032G	39.50	54.00	-14.50	15.89	3	Vertical	23	1.34	-
PK	11.40246G	53.43	74.00	-20.57	15.90	3	Vertical	23	1.34	-

802.11ac VHT20_Nss1,(MCS0)_2TX

5700MHz_TX

30/05/2019

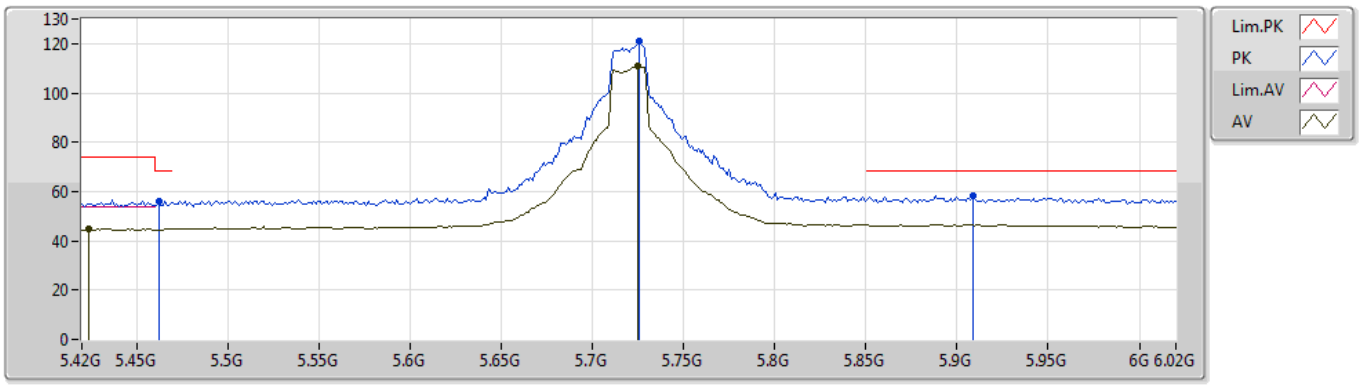


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.41302G	39.50	54.00	-14.50	15.88	3	Horizontal	346	1.44	-
PK	11.40354G	53.23	74.00	-20.77	15.90	3	Horizontal	346	1.44	-

802.11ac VHT20_Nss1,(MCS0)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

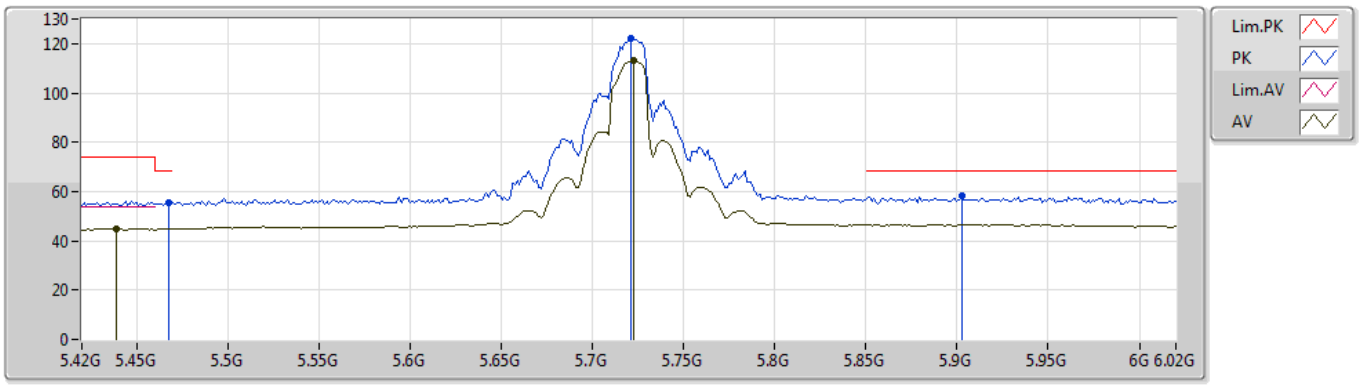


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4236G	44.78	54.00	-9.22	9.03	3	Vertical	0	1.46	-
AV	5.7248G	110.88	Inf	-Inf	9.54	3	Vertical	0	1.46	-
PK	5.462G	55.94	68.20	-12.26	9.24	3	Vertical	0	1.46	-
PK	5.726G	121.30	Inf	-Inf	9.55	3	Vertical	0	1.46	-
PK	5.9084G	58.35	68.20	-9.85	10.03	3	Vertical	0	1.46	-

802.11ac VHT20_Nss1,(MCS0)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

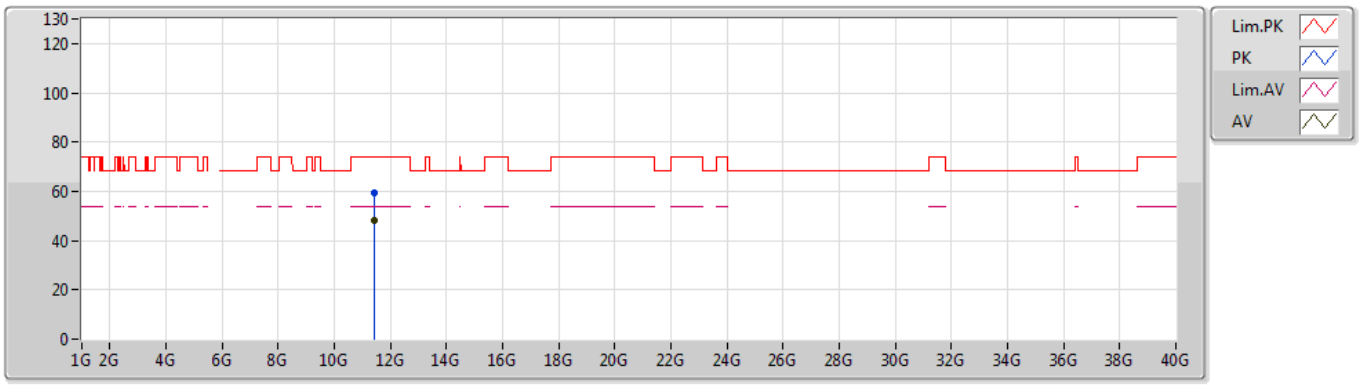


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4392G	44.85	54.00	-9.15	9.12	3	Horizontal	76	1.93	-
AV	5.7224G	113.28	Inf	-Inf	9.53	3	Horizontal	76	1.93	-
PK	5.468G	55.41	68.20	-12.79	9.27	3	Horizontal	76	1.93	-
PK	5.7212G	122.02	Inf	-Inf	9.53	3	Horizontal	76	1.93	-
PK	5.9024G	58.11	68.20	-10.09	10.02	3	Horizontal	76	1.93	-

802.11ac VHT20_Nss1,(MCS0)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

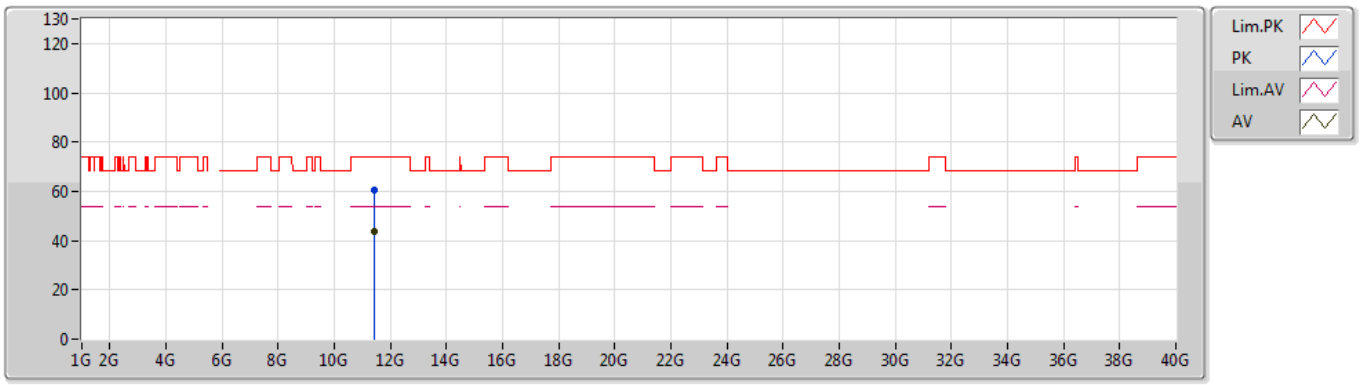


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.43652G	47.92	54.00	-6.08	21.91	3	Vertical	14	1.27	-
PK	11.43826G	59.64	74.00	-14.36	21.91	3	Vertical	14	1.27	-

802.11ac VHT20_Nss1,(MCS0)_2TX

17/06/2019

5720MHz Straddle 5.47-5.725GHz_TX

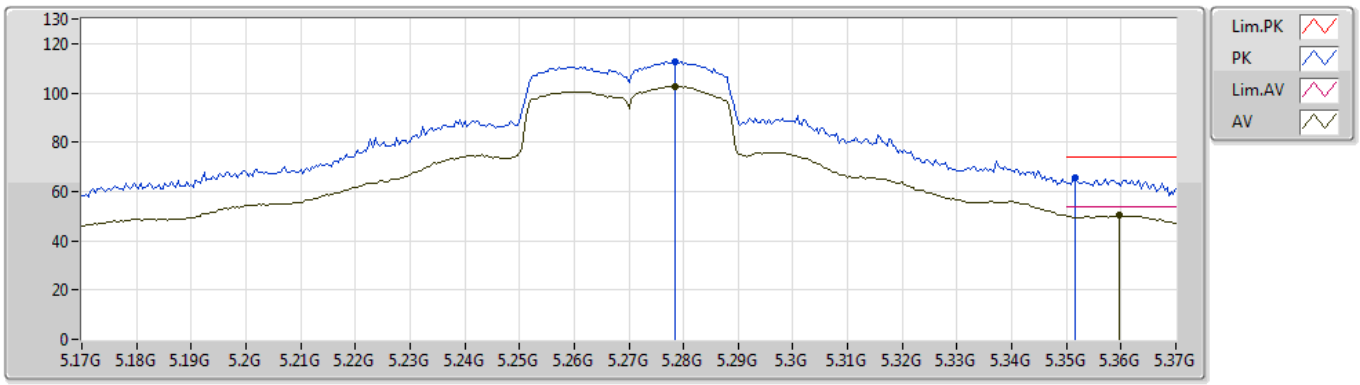


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.43952G	43.93	54.00	-10.07	17.94	3	Horizontal	349	1.27	-
PK	11.44012G	60.31	74.00	-13.69	17.94	3	Horizontal	349	1.27	-

802.11ac VHT40_Nss1,(MCS0)_2TX

30/05/2019

5270MHz_TX

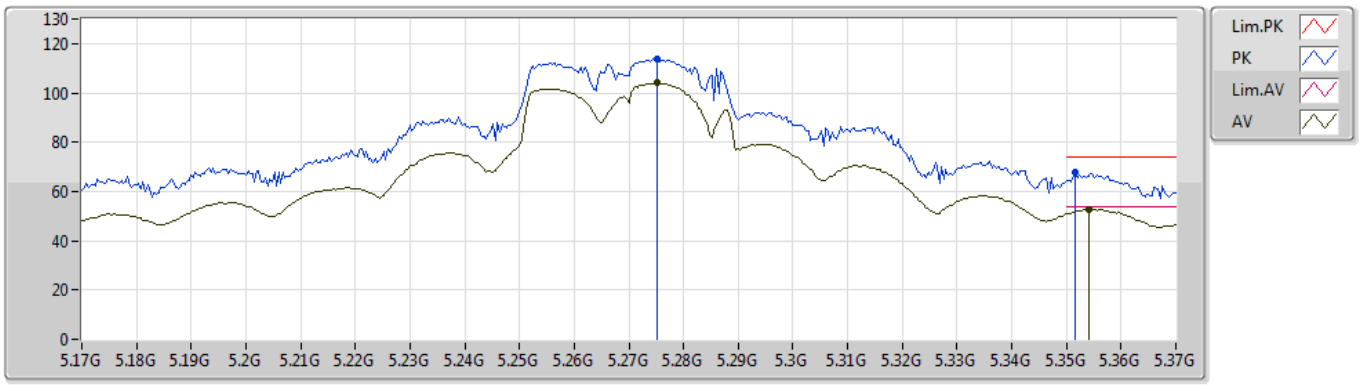


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.2784G	102.62	Inf	-Inf	4.45	3	Vertical	350	1.50	-
AV	5.3596G	50.26	54.00	-3.74	4.61	3	Vertical	350	1.50	-
PK	5.2784G	112.58	Inf	-Inf	4.45	3	Vertical	350	1.50	-
PK	5.3516G	65.53	74.00	-8.47	4.59	3	Vertical	350	1.50	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5270MHz_TX

30/05/2019

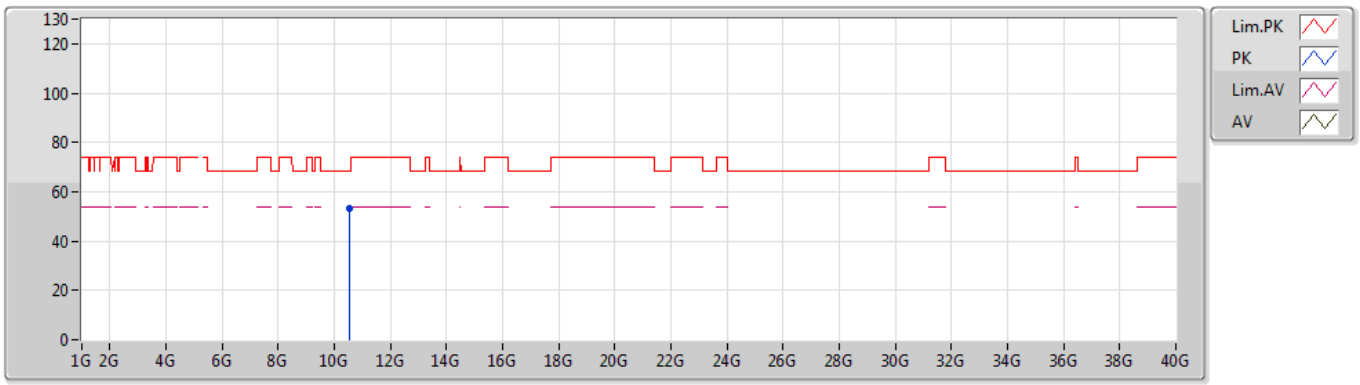


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.2752G	103.95	Inf	-Inf	4.44	3	Horizontal	76	2.05	-
AV	5.354G	52.77	54.00	-1.23	4.59	3	Horizontal	76	2.05	-
PK	5.2752G	113.80	Inf	-Inf	4.44	3	Horizontal	76	2.05	-
PK	5.3516G	68.08	74.00	-5.92	4.59	3	Horizontal	76	2.05	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5270MHz_TX

30/05/2019

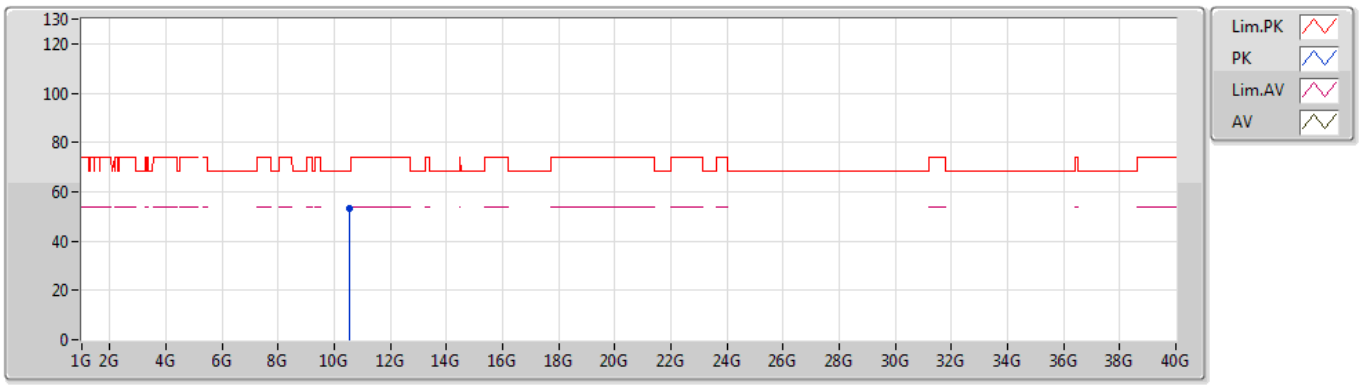


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.54834G	53.48	68.20	-14.72	15.29	3	Vertical	5	1.15	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5270MHz_TX

30/05/2019

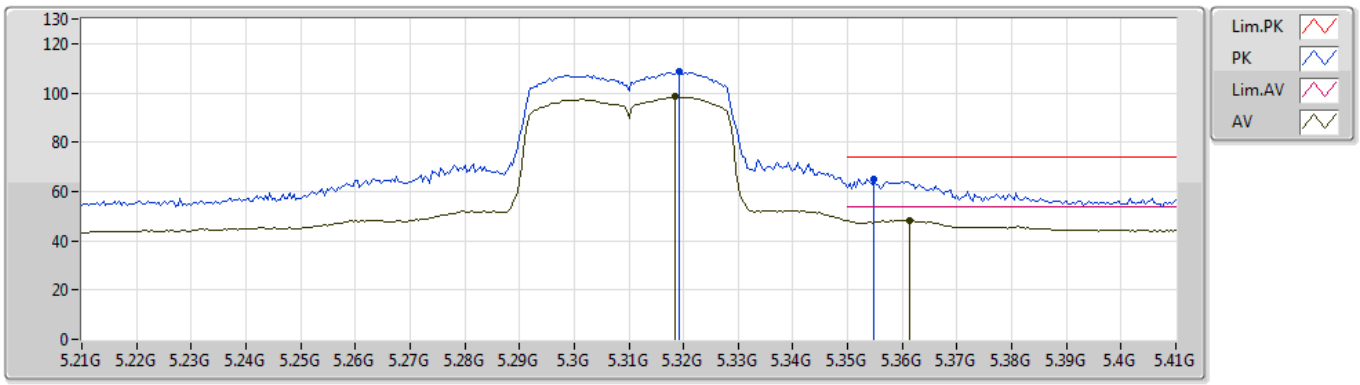


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.52908G	53.25	68.20	-14.95	15.24	3	Horizontal	278	2.14	-

802.11ac VHT40_Nss1,(MCS0)_2TX

30/05/2019

5310MHz_TX

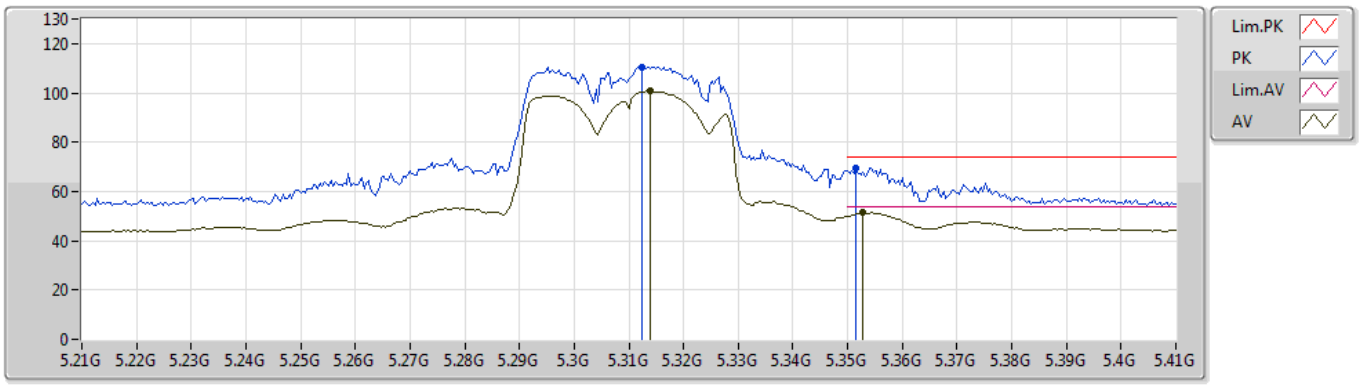


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.3184G	98.67	Inf	-Inf	4.52	3	Vertical	344	1.62	-
AV	5.3612G	48.32	54.00	-5.68	4.61	3	Vertical	344	1.62	-
PK	5.3192G	108.52	Inf	-Inf	4.52	3	Vertical	344	1.62	-
PK	5.3548G	65.20	74.00	-8.80	4.59	3	Vertical	344	1.62	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5310MHz_TX

30/05/2019

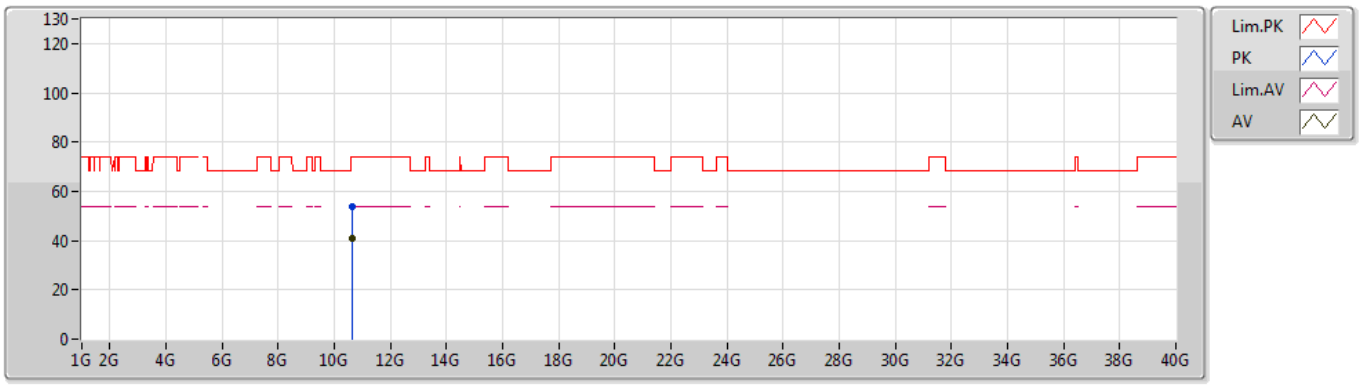


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.314G	100.60	Inf	-Inf	4.51	3	Horizontal	84	1.70	-
AV	5.3528G	51.35	54.00	-2.65	4.59	3	Horizontal	84	1.70	-
PK	5.3124G	110.58	Inf	-Inf	4.51	3	Horizontal	84	1.70	-
PK	5.3516G	69.74	74.00	-4.26	4.59	3	Horizontal	84	1.70	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5310MHz_TX

30/05/2019

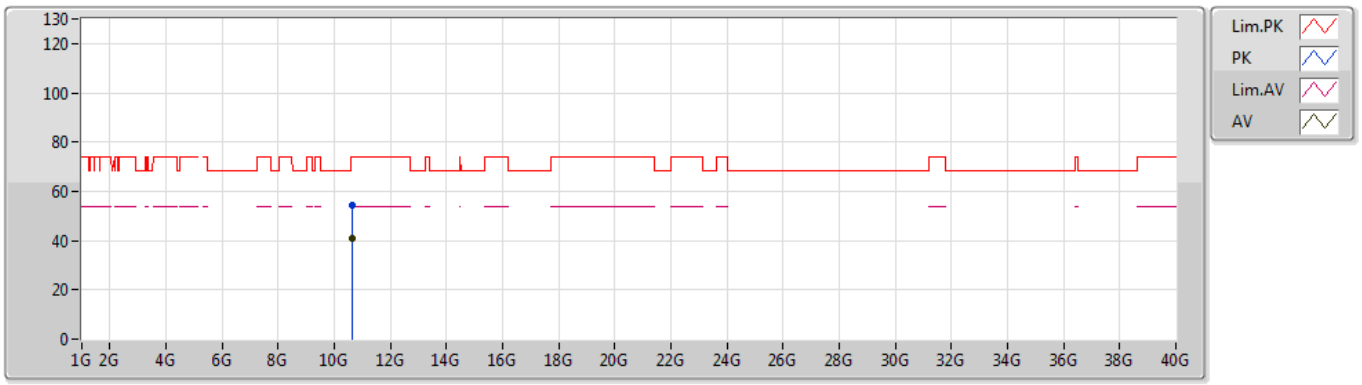


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.62726G	40.77	54.00	-13.23	15.48	3	Vertical	45	1.94	-
PK	10.6329G	54.07	74.00	-19.93	15.50	3	Vertical	45	1.94	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5310MHz_TX

30/05/2019

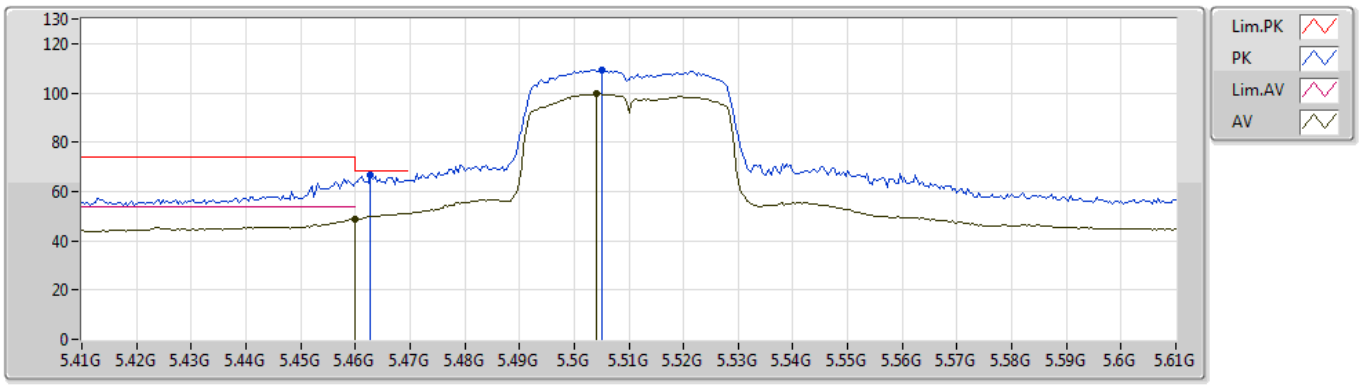


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	10.62582G	40.85	54.00	-13.15	15.48	3	Horizontal	51	1.65	-
PK	10.6191G	54.34	74.00	-19.66	15.45	3	Horizontal	51	1.65	-

802.11ac VHT40_Nss1,(MCS0)_2TX

30/05/2019

5510MHz_TX

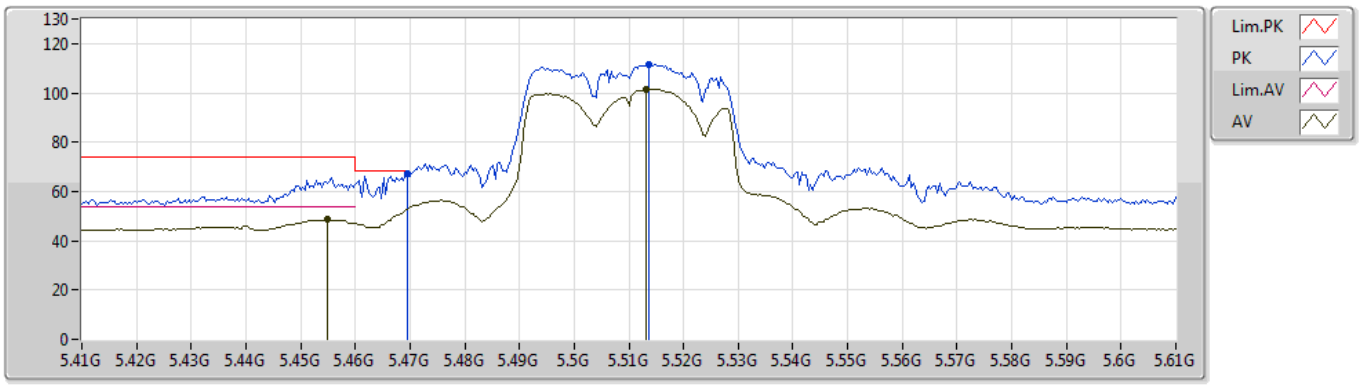


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	48.71	54.00	-5.29	4.80	3	Vertical	331	1.34	-
AV	5.504G	99.57	Inf	-Inf	4.88	3	Vertical	331	1.34	-
PK	5.4628G	66.87	68.20	-1.33	4.80	3	Vertical	331	1.34	-
PK	5.5052G	109.48	Inf	-Inf	4.88	3	Vertical	331	1.34	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5510MHz_TX

30/05/2019

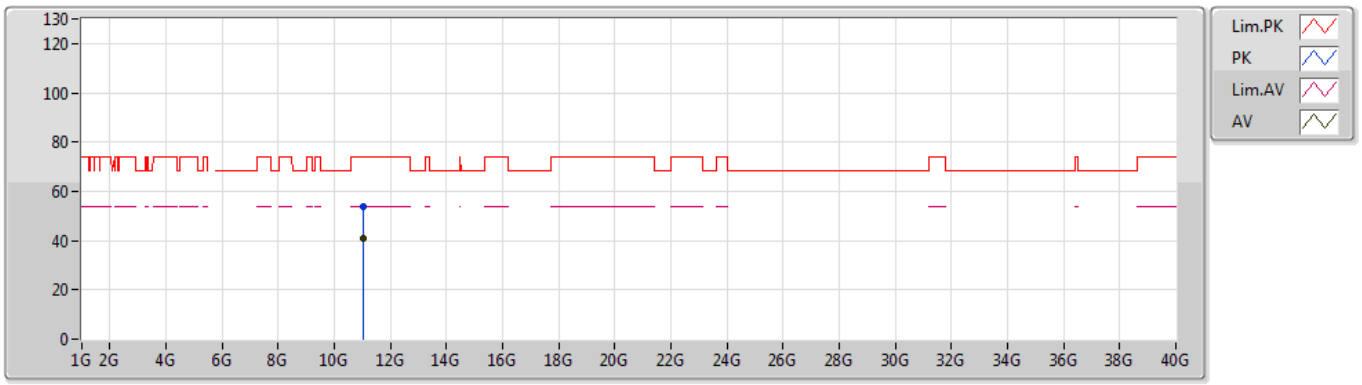


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4548G	48.79	54.00	-5.21	4.78	3	Horizontal	83	1.52	-
AV	5.5132G	101.40	Inf	-Inf	4.89	3	Horizontal	83	1.52	-
PK	5.4696G	67.18	68.20	-1.02	4.81	3	Horizontal	83	1.52	-
PK	5.5136G	111.60	Inf	-Inf	4.89	3	Horizontal	83	1.52	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5510MHz_TX

30/05/2019

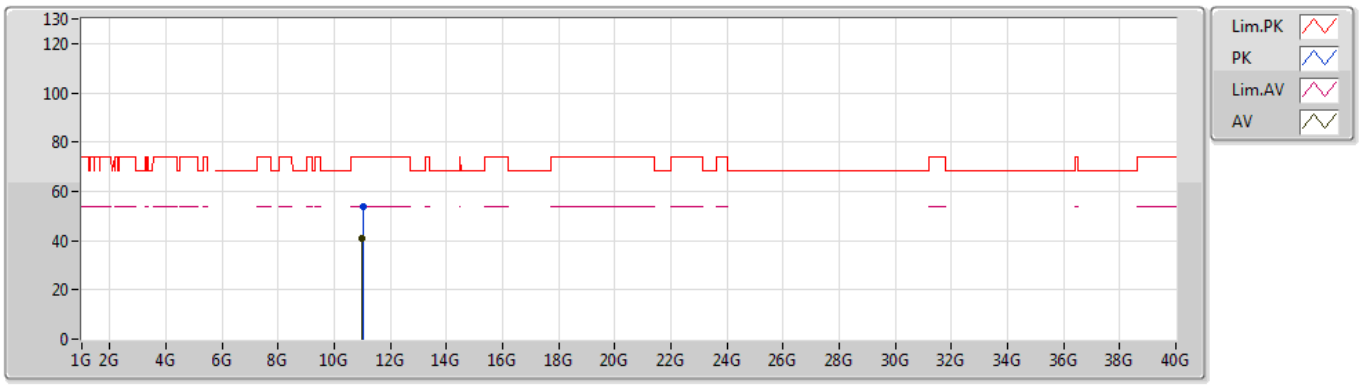


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.03218G	40.81	54.00	-13.19	16.33	3	Vertical	12	2.45	-
PK	11.01352G	53.96	74.00	-20.04	16.36	3	Vertical	12	2.45	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5510MHz_TX

30/05/2019

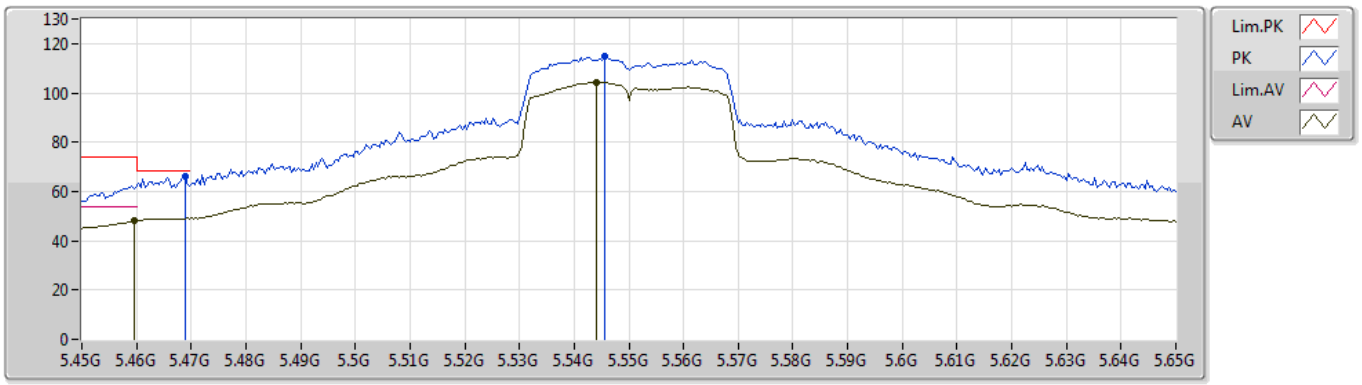


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.00674G	40.66	54.00	-13.34	16.37	3	Horizontal	147	2.30	-
PK	11.0317G	53.69	74.00	-20.31	16.34	3	Horizontal	147	2.30	-

802.11ac VHT40_Nss1,(MCS0)_2TX

30/05/2019

5550MHz_TX

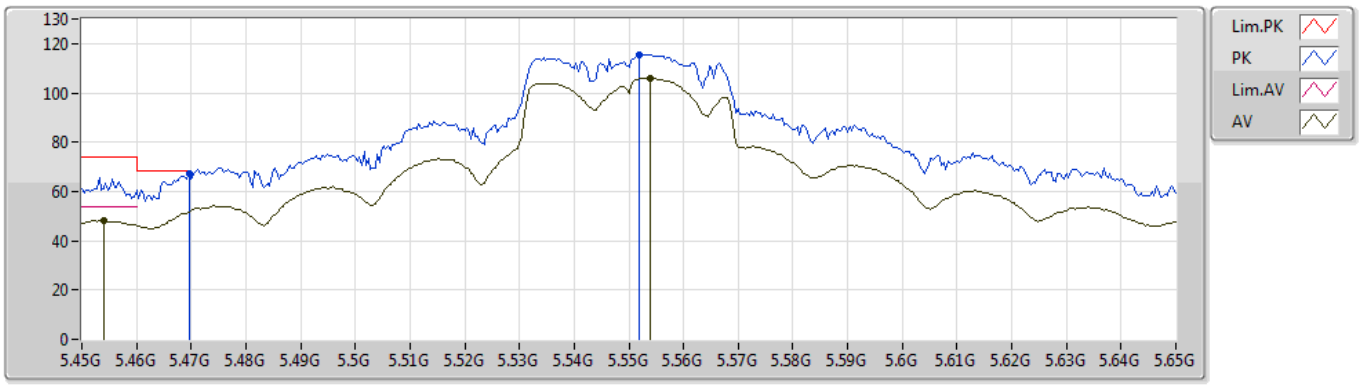


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4596G	48.06	54.00	-5.94	4.80	3	Vertical	332	1.49	-
AV	5.544G	104.29	Inf	-Inf	4.94	3	Vertical	332	1.49	-
PK	5.4688G	65.96	68.20	-2.24	4.81	3	Vertical	332	1.49	-
PK	5.5456G	114.86	Inf	-Inf	4.95	3	Vertical	332	1.49	-

802.11ac VHT40_Nss1,(MCS0)_2TX

30/05/2019

5550MHz_TX

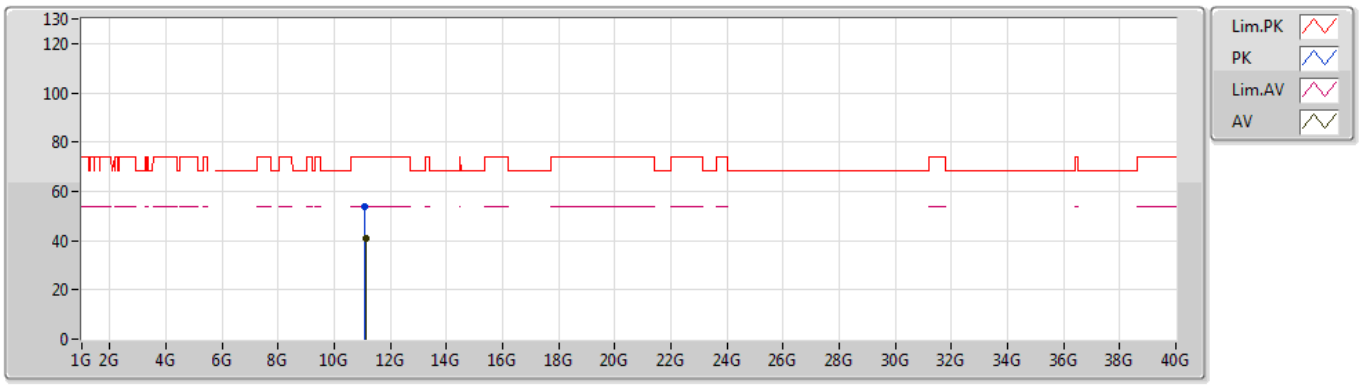


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.454G	48.21	54.00	-5.79	4.78	3	Horizontal	86	2.03	-
AV	5.554G	105.90	Inf	-Inf	4.97	3	Horizontal	86	2.03	-
PK	5.4696G	67.26	68.20	-0.94	4.81	3	Horizontal	86	2.03	-
PK	5.552G	115.66	Inf	-Inf	4.96	3	Horizontal	86	2.03	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5550MHz_TX

30/05/2019

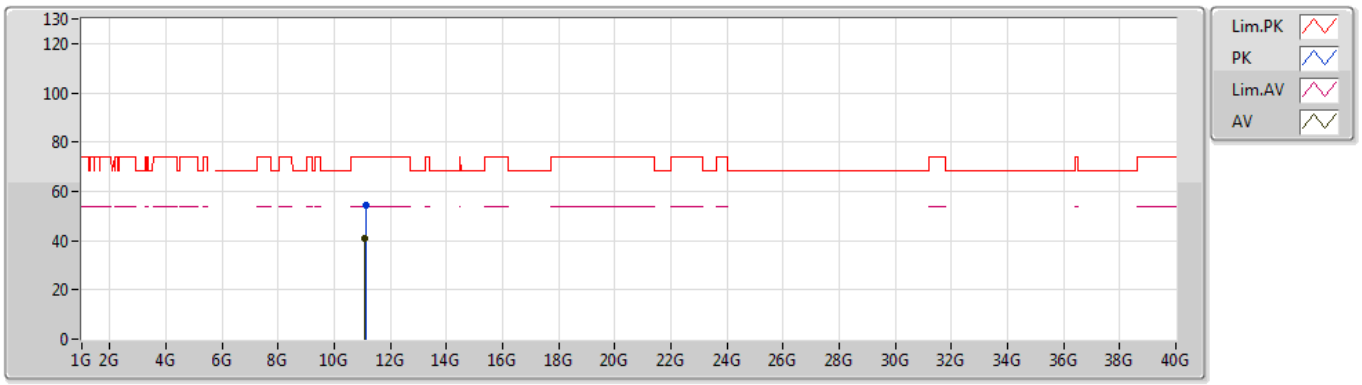


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.10678G	41.12	54.00	-12.88	16.25	3	Vertical	215	1.87	-
PK	11.0982G	54.00	74.00	-20.00	16.25	3	Vertical	215	1.87	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5550MHz_TX

30/05/2019

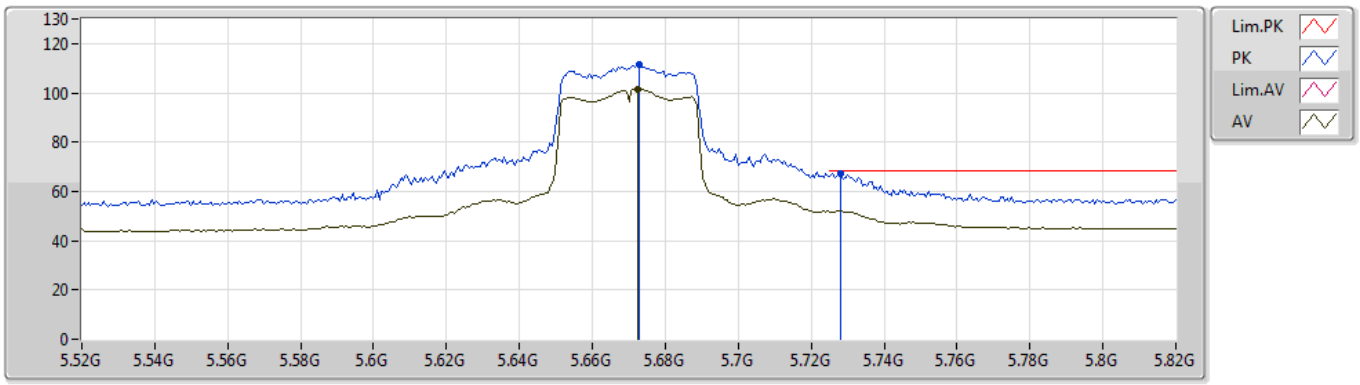


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.09052G	41.02	54.00	-12.98	16.27	3	Horizontal	356	2.10	-
PK	11.11164G	54.48	74.00	-19.52	16.24	3	Horizontal	356	2.10	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5670MHz_TX

30/05/2019

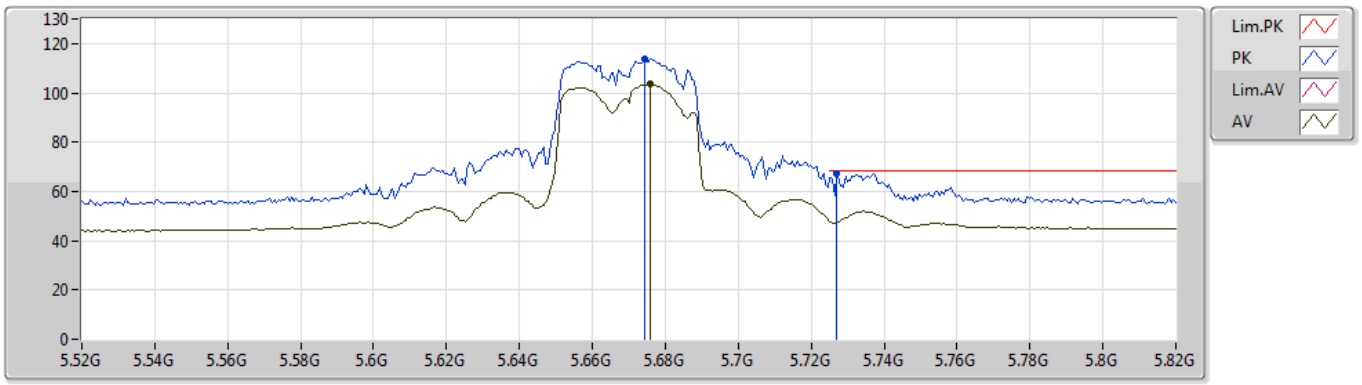


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.6724G	101.64	Inf	-Inf	5.19	3	Vertical	314	1.68	-
PK	5.673G	111.41	Inf	-Inf	5.19	3	Vertical	314	1.68	-
PK	5.7282G	67.38	68.20	-0.82	5.28	3	Vertical	314	1.68	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5670MHz_TX

30/05/2019

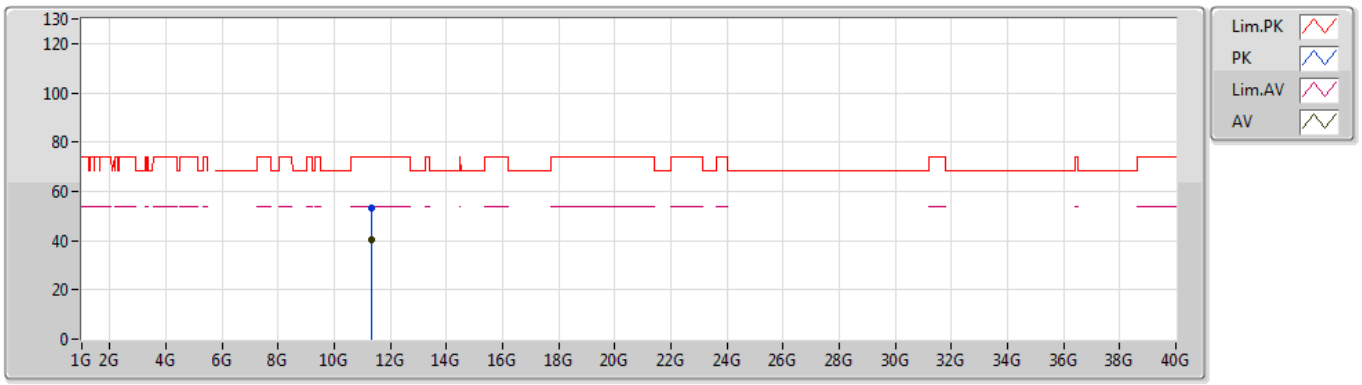


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.676G	103.46	Inf	-Inf	5.19	3	Horizontal	80	2.07	-
PK	5.6742G	113.93	Inf	-Inf	5.19	3	Horizontal	80	2.07	-
PK	5.727G	67.16	68.20	-1.04	5.28	3	Horizontal	80	2.07	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5670MHz_TX

30/05/2019

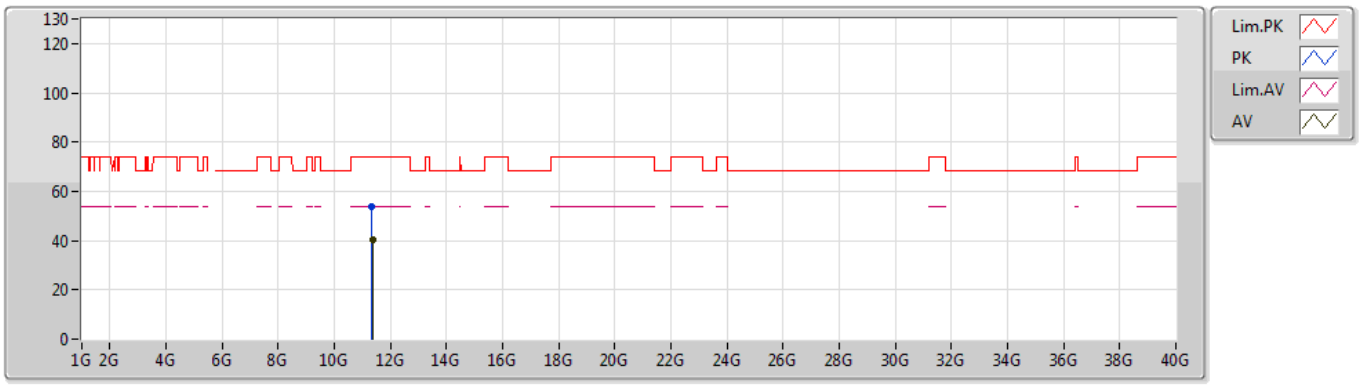


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.3262G	40.53	54.00	-13.47	15.98	3	Vertical	294	2.38	-
PK	11.32608G	53.49	74.00	-20.51	15.98	3	Vertical	294	2.38	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5670MHz_TX

30/05/2019

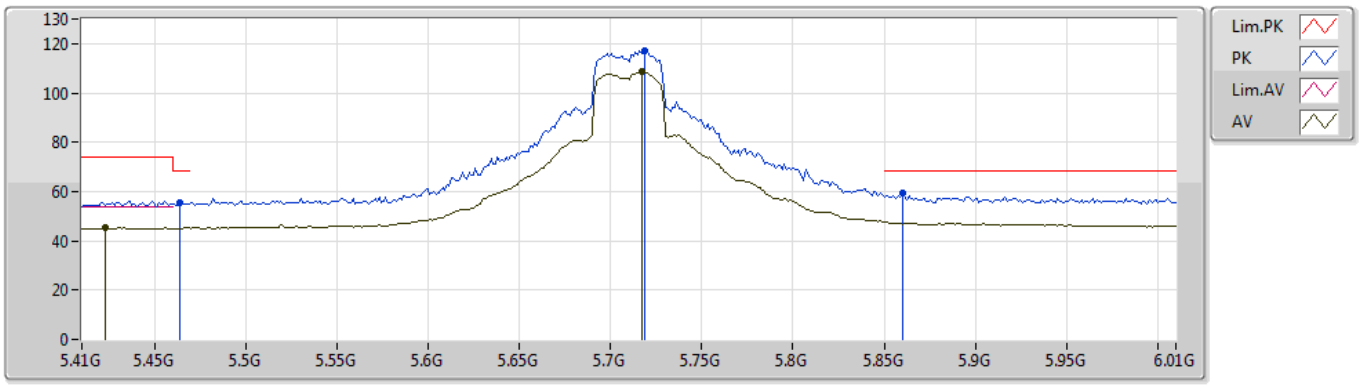


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.35386G	40.50	54.00	-13.50	15.95	3	Horizontal	123	2.11	-
PK	11.32578G	53.80	74.00	-20.20	15.98	3	Horizontal	123	2.11	-

802.11ac VHT40_Nss1,(MCS0)_2TX

17/06/2019

5710MHz Straddle 5.47-5.725GHz_TX

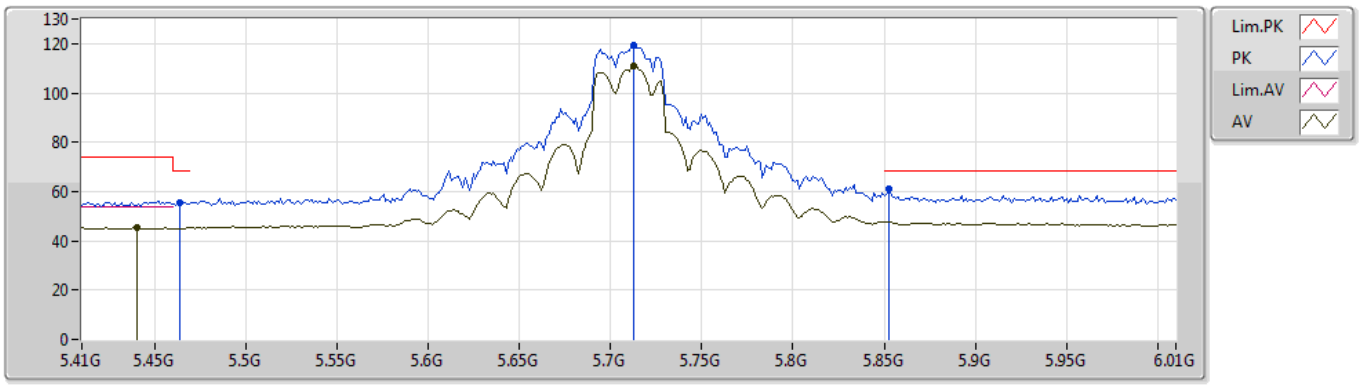


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4232G	45.29	54.00	-8.71	9.03	3	Vertical	357	1.46	-
AV	5.7172G	108.46	Inf	-Inf	9.52	3	Vertical	357	1.46	-
PK	5.464G	55.61	68.20	-12.59	9.25	3	Vertical	357	1.46	-
PK	5.7184G	117.27	Inf	-Inf	9.53	3	Vertical	357	1.46	-
PK	5.86G	59.37	68.20	-8.83	9.90	3	Vertical	357	1.46	-

802.11ac VHT40_Nss1,(MCS0)_2TX

17/06/2019

5710MHz Straddle 5.47-5.725GHz_TX

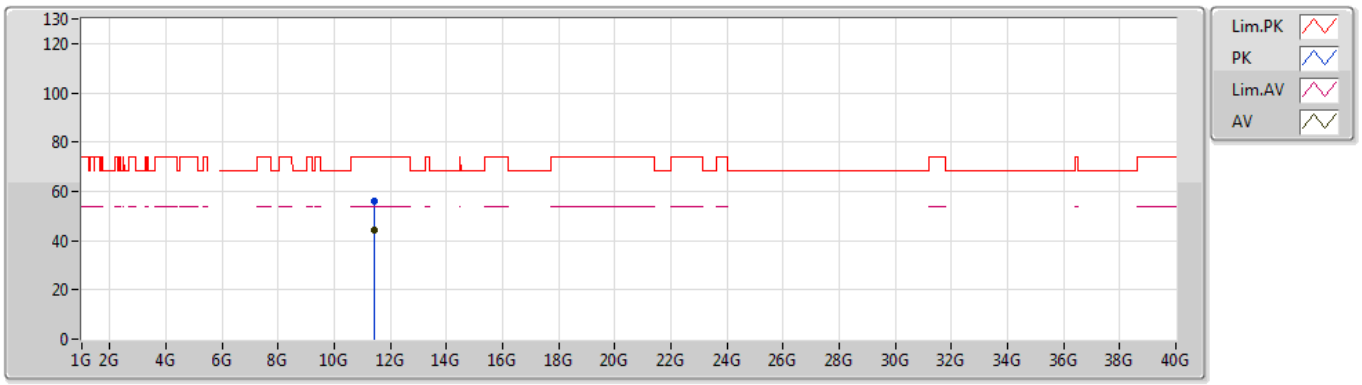


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.44G	45.34	54.00	-8.66	9.12	3	Horizontal	76	2.27	-
AV	5.7124G	110.77	Inf	-Inf	9.51	3	Horizontal	76	2.27	-
PK	5.464G	55.50	68.20	-12.70	9.25	3	Horizontal	76	2.27	-
PK	5.7124G	119.36	Inf	-Inf	9.51	3	Horizontal	76	2.27	-
PK	5.8528G	60.93	68.20	-7.27	9.89	3	Horizontal	76	2.27	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5710MHz Straddle 5.47-5.725GHz_TX

17/06/2019

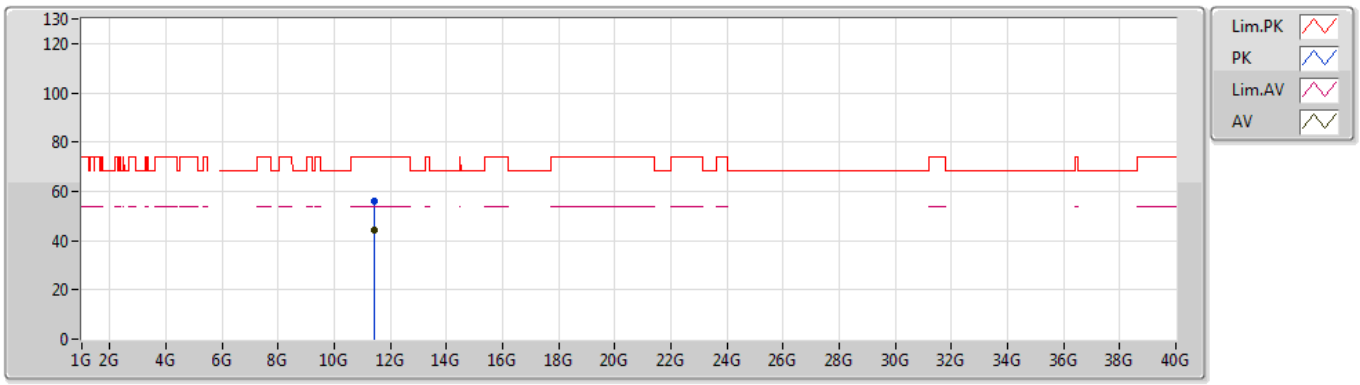


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.42726G	44.30	54.00	-9.70	17.95	3	Vertical	279	1.50	-
PK	11.41724G	55.76	74.00	-18.24	17.96	3	Vertical	279	1.50	-

802.11ac VHT40_Nss1,(MCS0)_2TX

5710MHz Straddle 5.47-5.725GHz_TX

17/06/2019

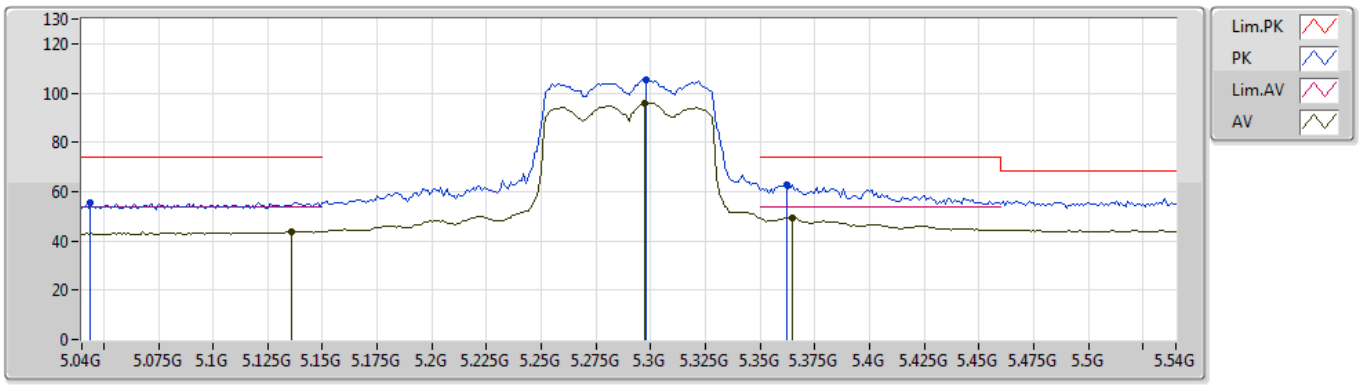


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.41982G	44.49	54.00	-9.51	17.96	3	Horizontal	4	1.30	-
PK	11.40638G	56.31	74.00	-17.69	17.97	3	Horizontal	4	1.30	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5290MHz_TX

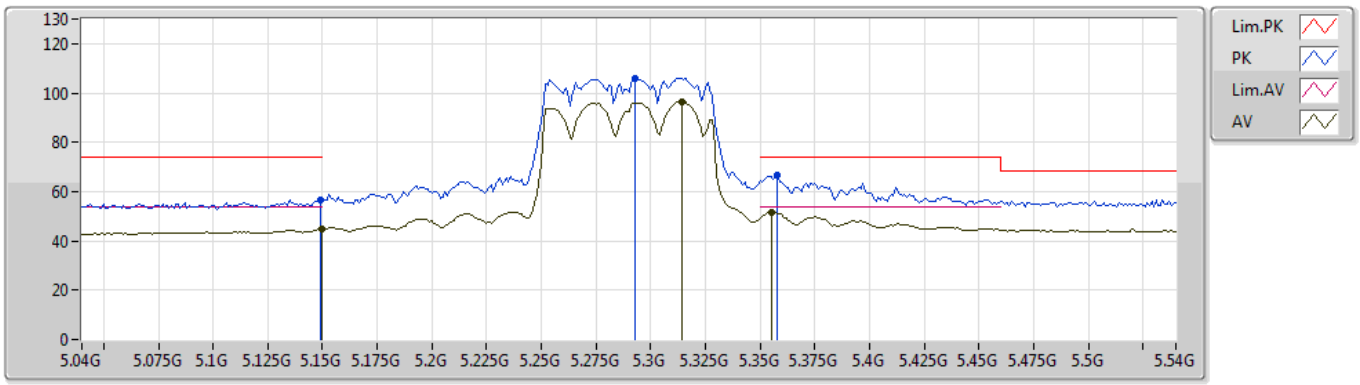


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.136G	43.94	54.00	-10.06	4.17	3	Vertical	335	1.74	-
AV	5.297G	95.81	Inf	-Inf	4.48	3	Vertical	335	1.74	-
AV	5.365G	49.23	54.00	-4.77	4.62	3	Vertical	335	1.74	-
PK	5.044G	55.55	74.00	-18.45	4.00	3	Vertical	335	1.74	-
PK	5.298G	105.41	Inf	-Inf	4.48	3	Vertical	335	1.74	-
PK	5.362G	62.82	74.00	-11.18	4.61	3	Vertical	335	1.74	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5290MHz_TX

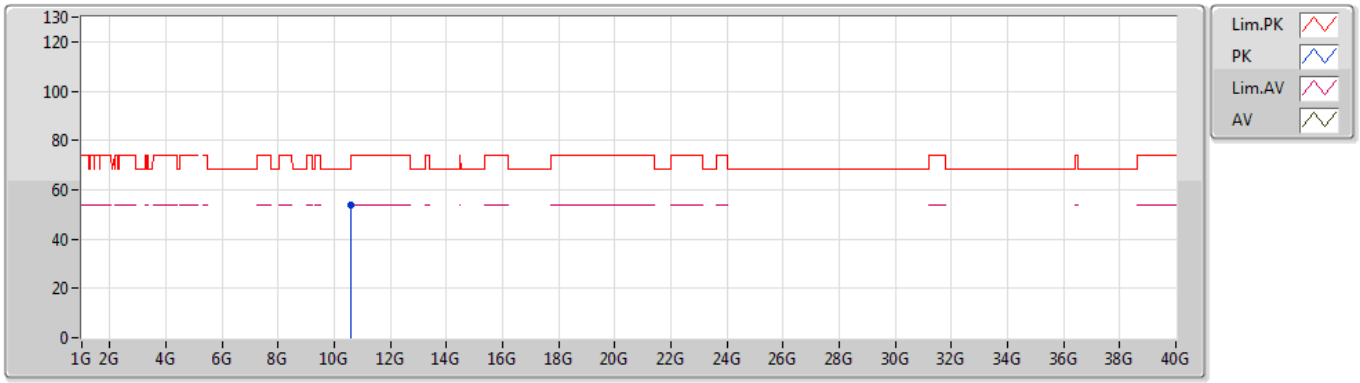


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.15G	44.81	54.00	-9.19	4.20	3	Horizontal	88	1.69	-
AV	5.314G	96.60	Inf	-Inf	4.51	3	Horizontal	88	1.69	-
AV	5.355G	51.64	54.00	-2.36	4.59	3	Horizontal	88	1.69	-
PK	5.149G	56.73	74.00	-17.27	4.20	3	Horizontal	88	1.69	-
PK	5.293G	106.06	Inf	-Inf	4.48	3	Horizontal	88	1.69	-
PK	5.358G	66.68	74.00	-7.32	4.60	3	Horizontal	88	1.69	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5290MHz_TX

30/05/2019

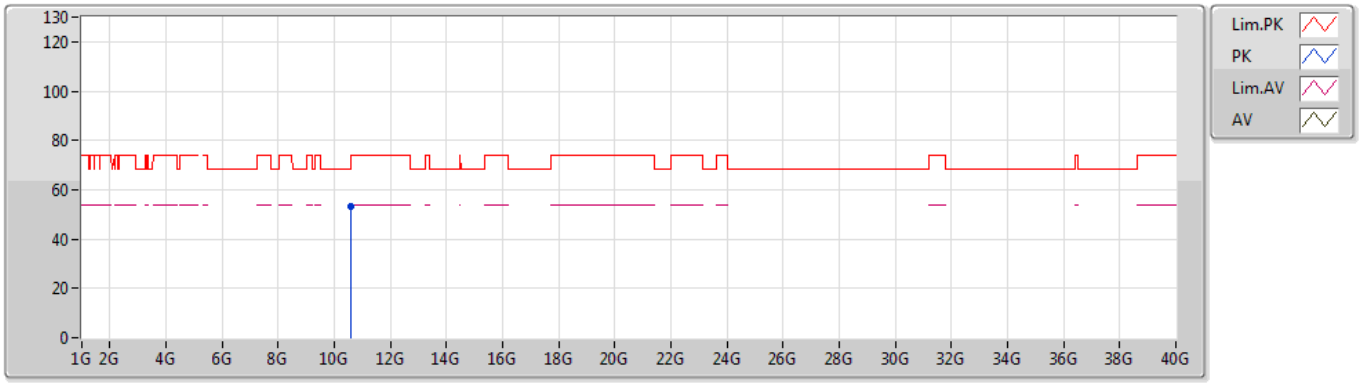


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.57382G	53.95	68.20	-14.25	15.35	3	Vertical	274	1.21	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5290MHz_TX

30/05/2019

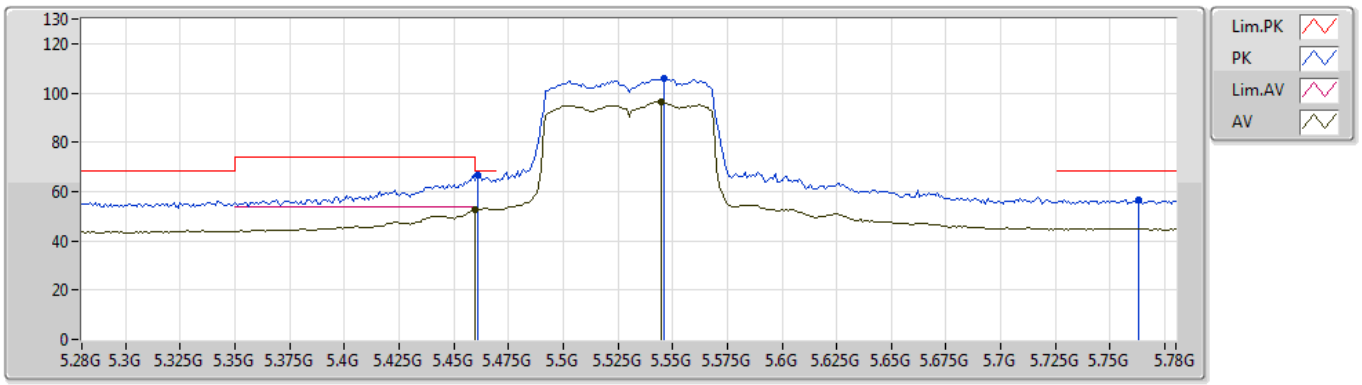


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	10.57418G	53.50	68.20	-14.70	15.35	3	Horizontal	168	2.05	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5530MHz_TX

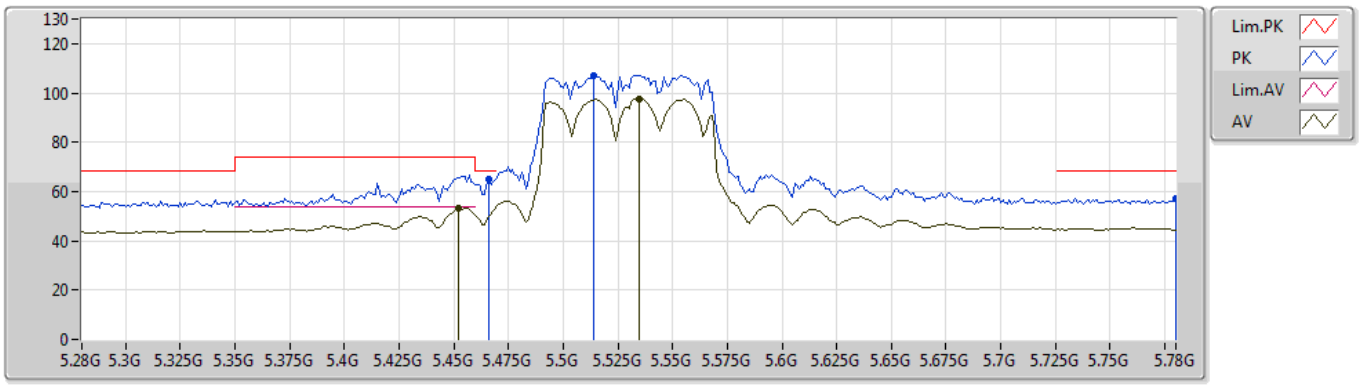


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	52.80	54.00	-1.20	4.80	3	Vertical	335	1.49	-
AV	5.545G	96.33	Inf	-Inf	4.94	3	Vertical	335	1.49	-
PK	5.461G	66.67	68.20	-1.53	4.80	3	Vertical	335	1.49	-
PK	5.546G	106.16	Inf	-Inf	4.95	3	Vertical	335	1.49	-
PK	5.763G	56.87	68.20	-11.33	5.35	3	Vertical	335	1.49	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5530MHz_TX

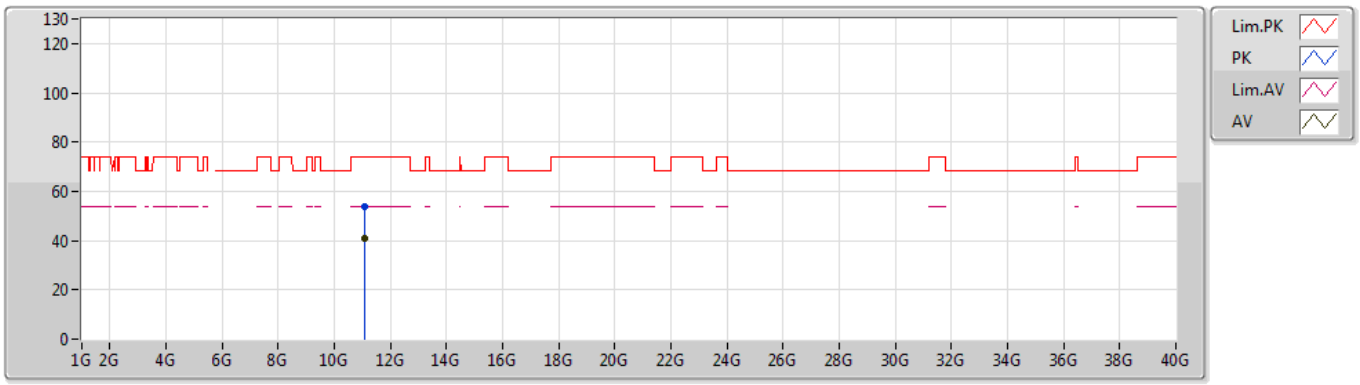


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.452G	53.21	54.00	-0.79	4.78	3	Horizontal	81	1.50	-
AV	5.535G	97.65	Inf	-Inf	4.93	3	Horizontal	81	1.50	-
PK	5.466G	65.01	68.20	-3.19	4.80	3	Horizontal	81	1.50	-
PK	5.514G	107.21	Inf	-Inf	4.90	3	Horizontal	81	1.50	-
PK	5.78G	57.41	68.20	-10.79	5.38	3	Horizontal	81	1.50	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5530MHz_TX

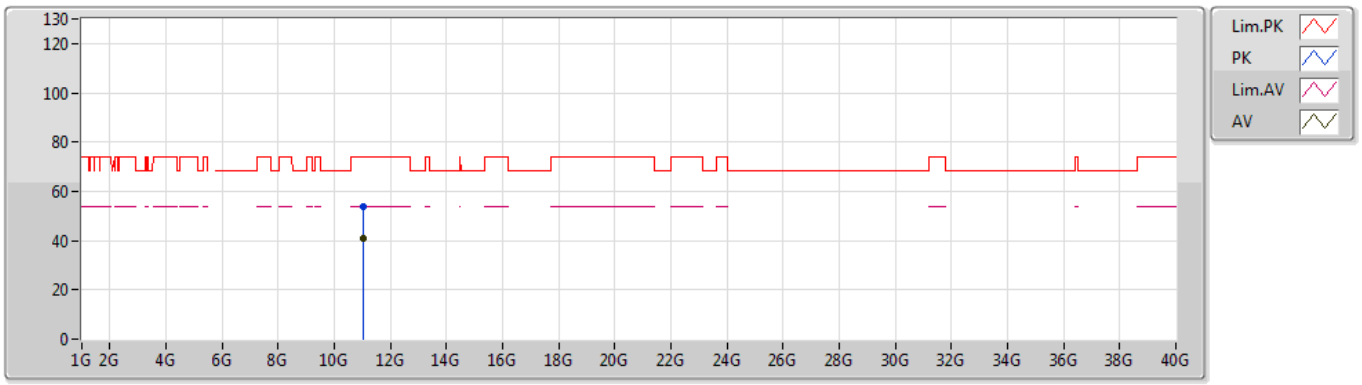


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.05898G	40.83	54.00	-13.17	16.30	3	Vertical	97	1.22	-
PK	11.07122G	54.05	74.00	-19.95	16.29	3	Vertical	97	1.22	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5530MHz_TX

30/05/2019

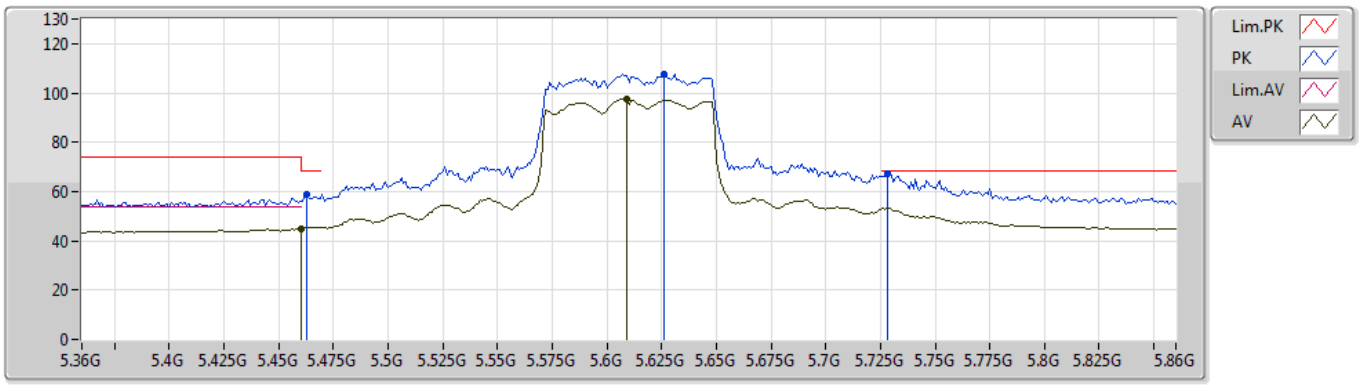


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.0513G	41.05	54.00	-12.95	16.32	3	Horizontal	68	1.78	-
PK	11.0549G	53.64	74.00	-20.36	16.31	3	Horizontal	68	1.78	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5610MHz_TX

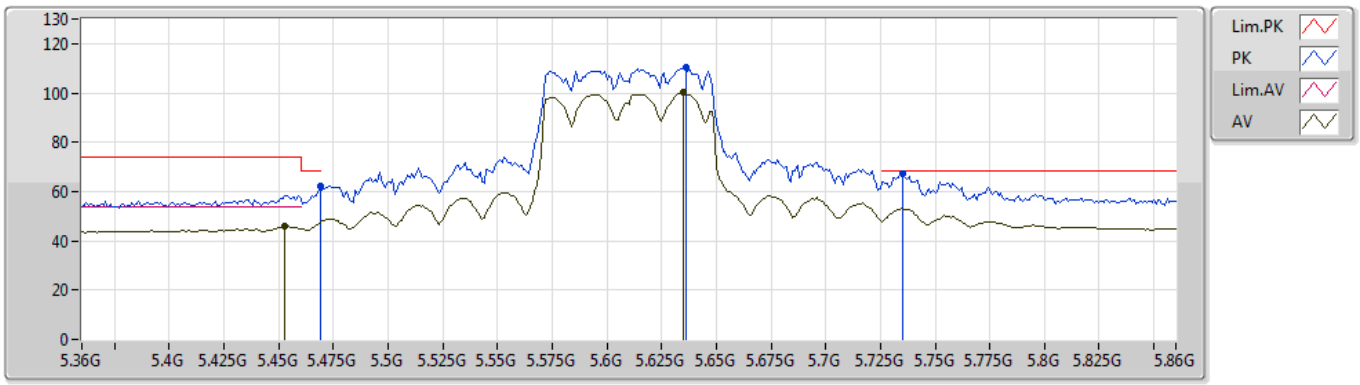


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.46G	45.02	54.00	-8.98	4.80	3	Vertical	320	1.49	-
AV	5.609G	97.78	Inf	-Inf	5.07	3	Vertical	320	1.49	-
PK	5.463G	58.64	68.20	-9.56	4.80	3	Vertical	320	1.49	-
PK	5.626G	107.67	Inf	-Inf	5.10	3	Vertical	320	1.49	-
PK	5.728G	67.35	68.20	-0.85	5.28	3	Vertical	320	1.49	-

802.11ac VHT80_Nss1,(MCS0)_2TX

30/05/2019

5610MHz_TX

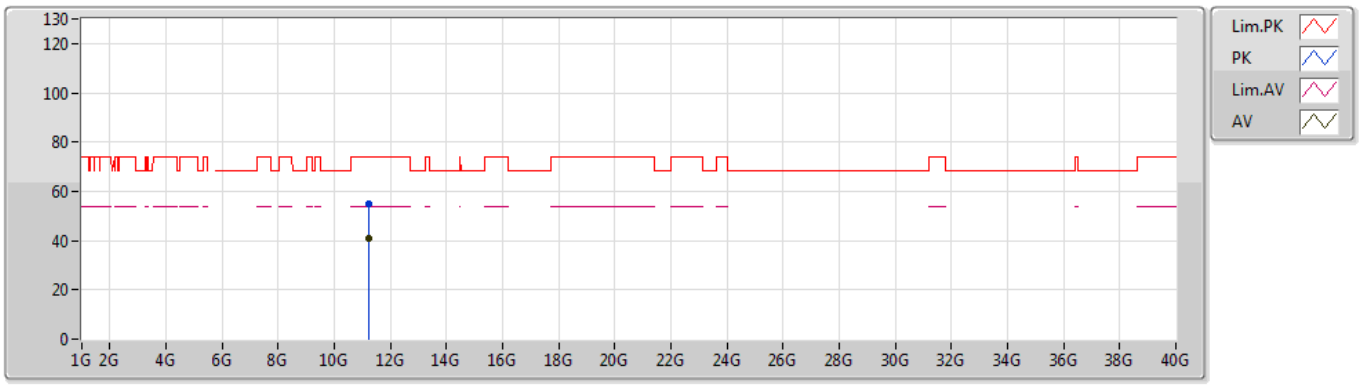


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.453G	45.73	54.00	-8.27	4.78	3	Horizontal	87	2.13	-
AV	5.635G	100.20	Inf	-Inf	5.11	3	Horizontal	87	2.13	-
PK	5.469G	62.44	68.20	-5.76	4.81	3	Horizontal	87	2.13	-
PK	5.636G	110.28	Inf	-Inf	5.11	3	Horizontal	87	2.13	-
PK	5.735G	67.41	68.20	-0.79	5.30	3	Horizontal	87	2.13	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5610MHz_TX

30/05/2019

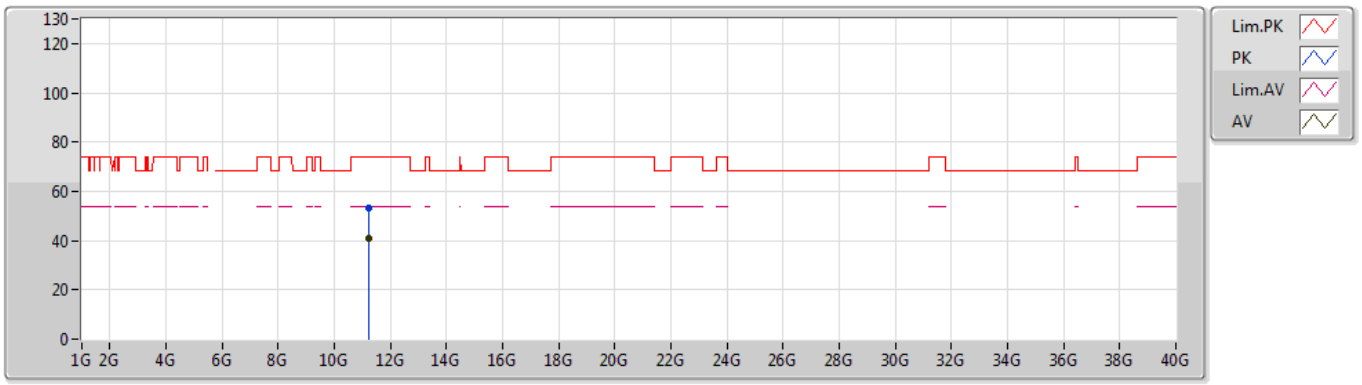


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.20764G	40.98	54.00	-13.02	16.12	3	Vertical	160	2.08	-
PK	11.20836G	54.75	74.00	-19.25	16.12	3	Vertical	160	2.08	-

802.11ac VHT80_Nss1,(MCS0)_2TX

5610MHz_TX

30/05/2019

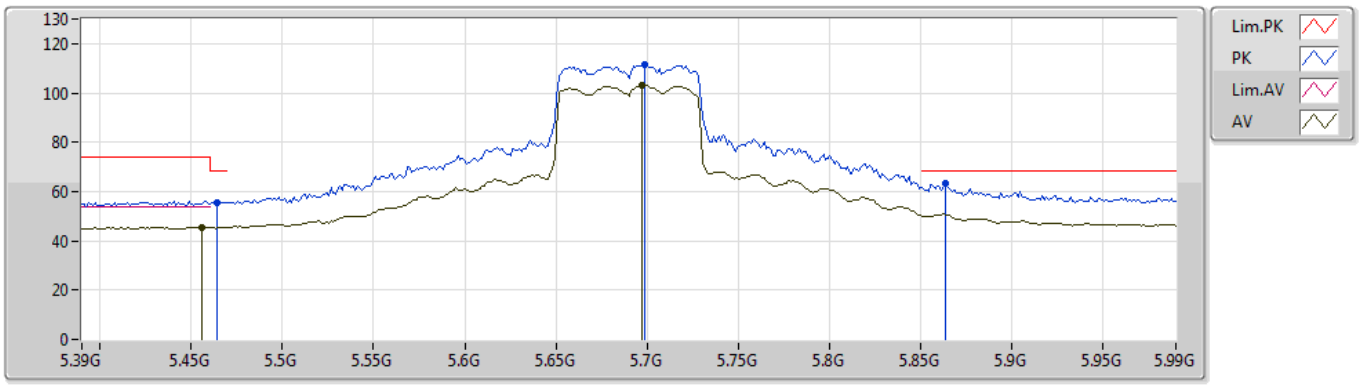


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.21256G	40.86	54.00	-13.14	16.12	3	Horizontal	331	2.05	-
PK	11.20632G	53.40	74.00	-20.60	16.12	3	Horizontal	331	2.05	-

802.11ac VHT80_Nss1,(MCS0)_2TX

17/06/2019

5690MHz Straddle 5.47-5.725GHz_TX

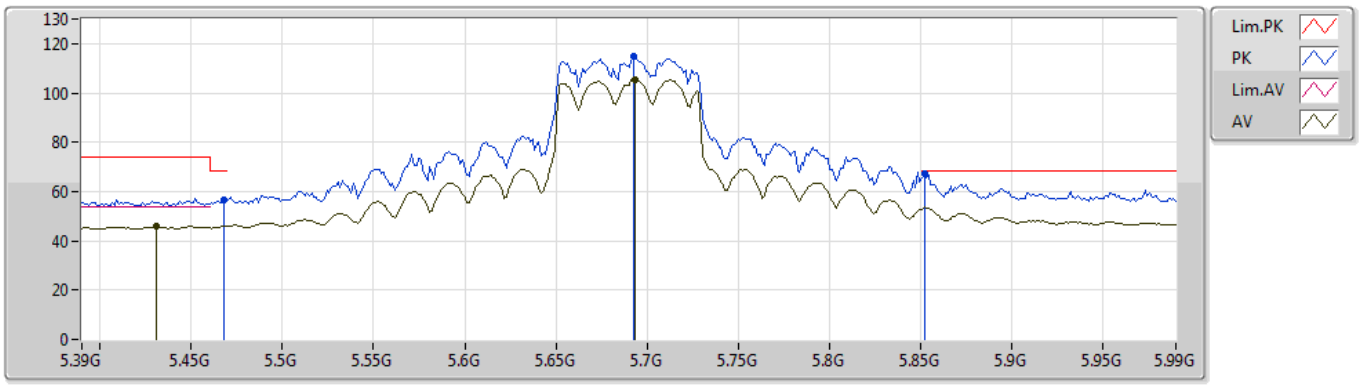


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.456G	45.47	54.00	-8.53	9.20	3	Vertical	354	1.50	-
AV	5.6972G	103.25	Inf	-Inf	9.48	3	Vertical	354	1.50	-
PK	5.4644G	55.68	68.20	-12.52	9.25	3	Vertical	354	1.50	-
PK	5.6984G	111.41	Inf	-Inf	9.48	3	Vertical	354	1.50	-
PK	5.864G	63.13	68.20	-5.07	9.92	3	Vertical	354	1.50	-

802.11ac VHT80_Nss1,(MCS0)_2TX

17/06/2019

5690MHz Straddle 5.47-5.725GHz_TX

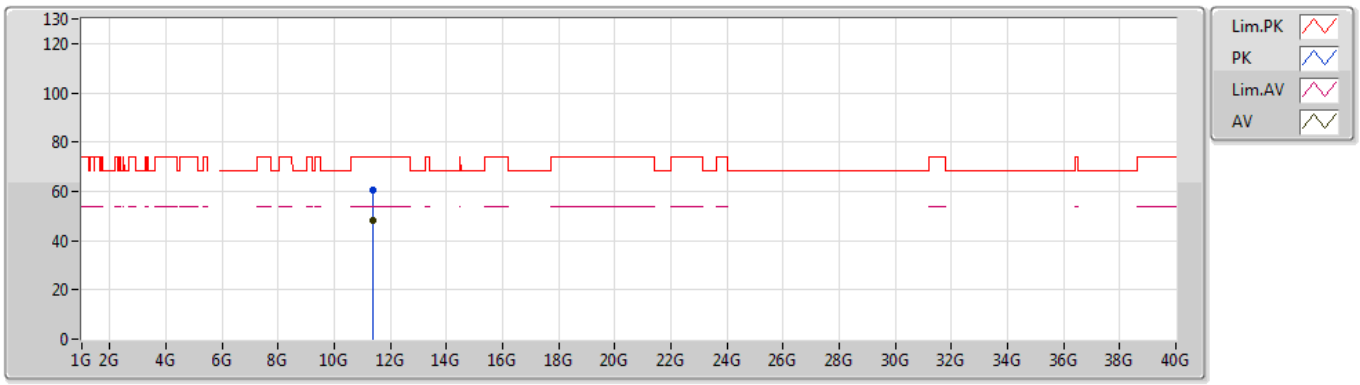


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.4308G	45.73	54.00	-8.27	9.07	3	Horizontal	73	2.03	-
AV	5.6936G	105.41	Inf	-Inf	9.46	3	Horizontal	73	2.03	-
PK	5.468G	56.41	68.20	-11.79	9.27	3	Horizontal	73	2.03	-
PK	5.6924G	114.68	Inf	-Inf	9.46	3	Horizontal	73	2.03	-
PK	5.852G	67.41	68.20	-0.79	9.88	3	Horizontal	73	2.03	-

802.11ac VHT80_Nss1,(MCS0)_2TX

17/06/2019

5690MHz Straddle 5.47-5.725GHz_TX

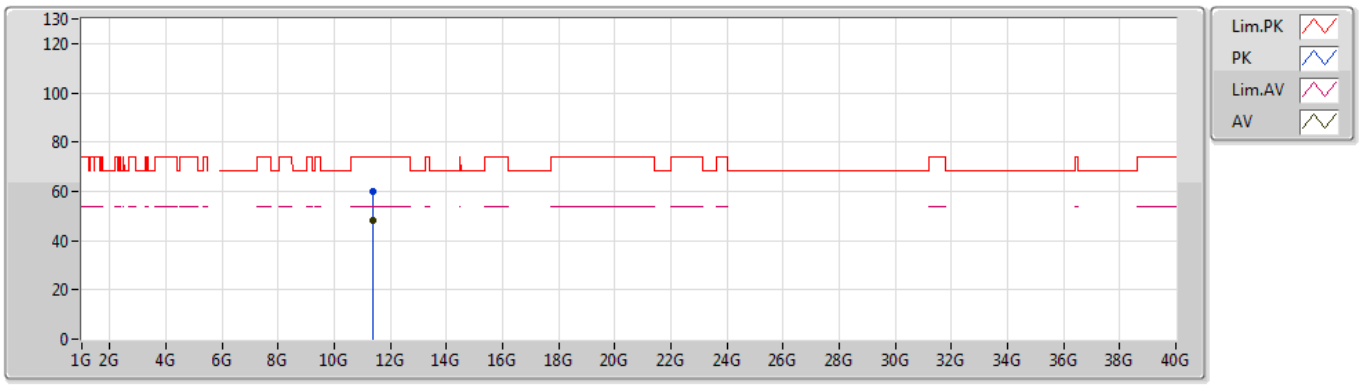


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.39422G	48.29	54.00	-5.71	21.93	3	Vertical	351	2.20	-
PK	11.37166G	60.52	74.00	-13.48	21.93	3	Vertical	351	2.20	-

802.11ac VHT80_Nss1,(MCS0)_2TX

17/06/2019

5690MHz Straddle 5.47-5.725GHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.39392G	48.27	54.00	-5.73	21.93	3	Horizontal	295	1.89	-
PK	11.38654G	59.69	74.00	-14.31	21.93	3	Horizontal	295	1.89	-

Hewlett Packard Enterprise

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.
   - For CDD transmissions, directional gain is calculated as follows, NANT = 2, NSS = 1.
   - If all antennas have the same gain, GANT, Directional gain = GANT + Array Gain, where Array Gain is as follows.
   - For power spectral density (PSD) measurements on all devices,
     Array Gain = 10 log (NANT/ NSS) dB = 3.01;
   - For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for NANT $\leq$ 4;

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac, not include 802.11a/b/g. Directional gain = GANT + BF Gain, BF Gain is declared by the manufacture.

3. ArubaOS algorithm will reduce the Tx Power by a factor of 10Log(N) when BF Mode is active.

Sincerely,

Robert Hastings
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Hewlett Packard Enterprise
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+1.659.236.9611